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FOOD FISH PRODUCTS

SITUATION & OUTLOOK

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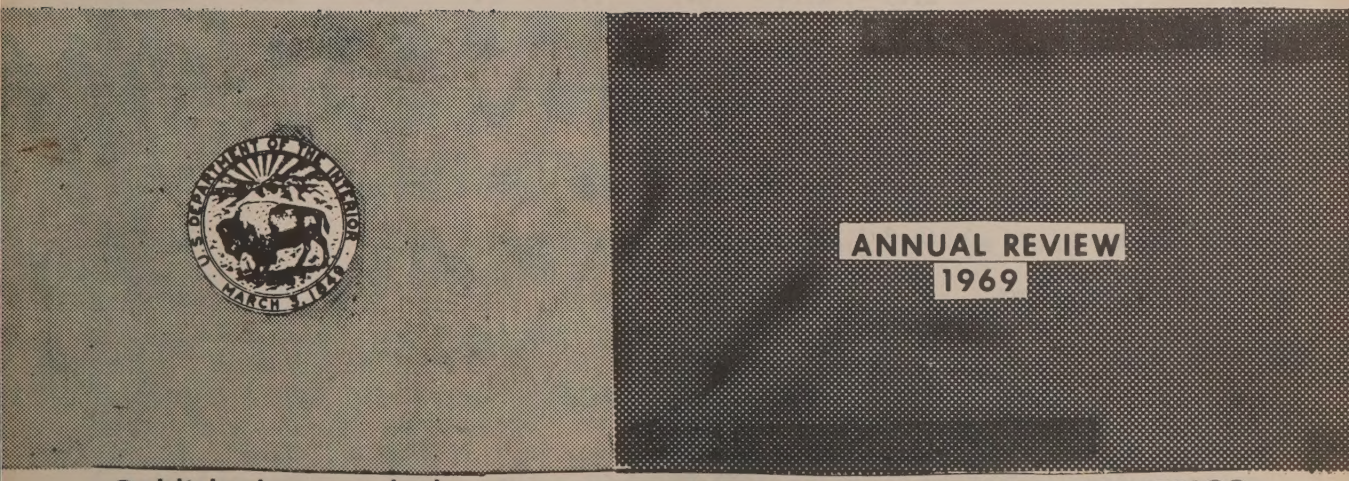
Current Economic Analysis - F 7 JUNE 1970



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PREFACE

This report covers only a limited number of food fish items for which sufficient data and information are available to provide reliable outlook indications. Other food fish species will be added as soon as material is developed.

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Table 1. Supplies of selected fishery products, 1968 and 1969

Species or product	Landings or production		Beginning stocks		Imports		Total	
	1968	1969	1968	1969	1968	1969	1968	1969
	Million pounds, edible weight							
Flounders	53.1	49.1	10.7	7.8	39.5	48.1	103.3	105.0
Haddock	24.6	15.4	6.9	4.8	26.7	28.1	58.2	48.3
Ocean perch	22.4	21.6	18.0	19.7	50.4	64.2	90.8	105.5
Cod	17.5	19.4	6.5	7.6	46.6	61.9	70.6	88.9
Pollock and cusk	2.8r	3.9	.9	.9	5.4	5.9	9.1	10.7
Subtotal (groundfish)	120.4r	109.4	43.0	40.8	168.6	208.2	332.0r	358.4
Canned tuna	396.0	396.0	N.A.	N.A.	67.2	73.0	463.1	469.0
Canned salmon	164.8	122.3	100.2	131.8	5.0	2.4	270.0	256.5
Fresh & frozen salmon	35.6	43.0	7.7	13.0	7.6	6.5	50.9	62.5
Canned sardines	39.8	23.8	13.2	23.3	55.9	43.3	108.9	90.4
Fish sticks & portions	270.7	320.4	14.0	24.0	.9	1.5	285.6	345.9
Pacific halibut	19.3	25.2	19.3	13.7	33.0	32.0	71.6	70.9
Total	1046.7r	1040.1	197.4	246.6	332.4	359.8	1582.1r	1653.6

FOOD FISH SITUATION AND OUTLOOK

Approved by the Bureau of Commercial Fisheries Outlook and Situation Board, May 20, 1970

CONTENTS

	Page
Summary	3
Review and outlook	11
Groundfish	11
(Flounders, haddock, cod, ocean perch, pollock and cusk)	11
Fish blocks	29
Fish sticks and portions	33
Halibut	39
Salmon	46
Canned	50
Fresh and frozen	51
Canned tuna	57
Canned sardines	69
Department of Defense purchases of food fish	74
List of tables	75
List of figures	78

SUMMARY

Review--1969

The average price level as reflected by the BLS (Bureau of Labor Statistics) wholesale price index for all commodities rose 4 percent last year. Prices of food products increased 6.1 percent. Frozen processed fish and unprocessed fresh finfish had sizeable advances, increasing 10.1 percent and 23.4 percent, respectively. Prices for groundfish were stronger in 1969 than many expected. The only food fish products that declined in price were cod sticks and portions and some species of canned salmon. Canned salmon prices, however, started to rise in the latter part of 1969.

Americans ate 310 million pounds (edible weight) of groundfish (flounders, haddock, cod, ocean perch, pollock, and cusk, excluding fish sticks and portions) last year,

19 million pounds more than in 1968 (table 9). For these items they paid over 15 percent more than in 1968. Sales of 330 million pounds of fish sticks and portions were 65 million pounds higher than in 1968 (table 25), but prices were lower.

The increase in groundfish consumption was attributed to bigger sales of ocean perch and cod than in 1968. Sales of flounders increased only slightly, while sales of haddock declined by 12 million pounds, edible weight.

The same total amount (680 million pounds) of canned tuna, salmon, and sardines was sold in 1968 and 1969--at only slightly higher average prices. The decline in sales of sardines was made up by increased sales of tuna and salmon.

While total consumption of fresh, frozen, and canned food fish products in the United States has been increasing faster than U.S. landings, per capita consumption has remained more or less constant. As the population increased, the consumption has been maintained by greater imports.

Per capita consumption of individual species, however, fluctuates from year to year. The biggest declines in 1969 were in the consumption of haddock (down 23%) and canned sardines (down 18%).

Their decline was more than offset by the growing consumption for ocean perch (up 24%), sticks and portions (up 25%), and canned salmon (up 9%), (table 3).

Domestic landings are generally less than half of total supplies of food fish (table 1). Groundfish landings are declining while imports are increasing. For every 10 pounds of groundfish available (landings and imports), 4.2 pounds were landed by U.S. fishermen in 1968 and only 3.4 pounds in 1969. U.S. halibut landings improved last year. For every 10 pounds of halibut landings and imports, 4.4 pounds were landed in 1969--increasing from the 3.7 pounds in 1968. Landings and imports of tuna were about even during the last 2 years (table 2).

OUTLOOK--1970

In 1970, the civilian population will consume about 1.2 billion pounds of fresh and frozen finfish and shellfish, edible weight. Over one-half of this amount will come from groundfish in the form of fillets, steaks, sticks, and portions, three-fourths of which will be imported.

Prices for groundfish products are expected to increase in 1970 but at a much more moderate rate than in 1969. Consumption of groundfish is expected to be 5 to 8 million pounds higher than 1969. A strong demand for groundfish as a whole is indicated by the increasing fishing effort on these two species due to higher exvessel prices and the continuous trend of higher imports of cod and ocean perch.

We expect that consumption of fish sticks and portions will be higher than that of groundfish fillets and steaks and likely will be about 365 million pounds in 1970. The continuous decline in prices of sticks and portions since 1966 has contributed to a 52-percent increase in sales during the past 4 years. Sales increased from 217 million pounds in 1965 to 330 million pounds in 1969.

With Canada and the Scandinavian countries competing for the fish block market in the United States, supplies of fish blocks have increased and prices have been low for the last 3 years. In 1969, however, Canada began a price stabilization program. This caused prices to increase in the latter part of 1969 and will continue to exert the same influence this year.

The Pacific halibut catch quota

for 1970 is reduced to 53 million pounds, dressed weight, for both the United States and Canadian vessels--2.5 million pounds lower than the 1969 quota. Combined landings are not expected to exceed the quota this year as they did in 1969 by almost 3 million pounds. Consequently, a decline in landings of over 5 million pounds from last year is likely.

Consumption of canned salmon is expected to increase sharply in the last half of 1970. Extraordinarily good catches are expected. Red salmon should be especially plentiful if the present forecasts are borne out. Owing to larger supplies, prices of canned salmon in the second half of this year will likely average below a year ago.

Table 2. U.S. landings compared with imports of selected finfish species, 1967, 1968, and 1969

Species	Landings			Imports			Landings as a percent of total		
	1967	1968	1969	1967	1968	1969	1967	1968	1969
	Million pounds, edible weight						Percent		
Flounders	53.8	53.1	49.1	33.3	39.5	48.1	62	57	51
Ocean perch	27.6	22.4	21.6	36.3	50.4	64.2	43	31	25
Haddock	34.6	24.6	15.4	21.4	26.7	28.1	62	48	35
Cod	16.4	17.5	19.4	32.1	46.6	61.9	34	27	24
Pollock & cusk	3.2	2.8	3.9	1/ 4.3	1/ 5.4	1/ 5.9	43	34	40
Subtotal	135.6	120.4	109.4	127.4	168.6	208.2	52	42	34
Pacific halibut	21.8	19.3	25.2	16.5	33.0	32.0	57	37	44
Salmon	123.8	164.8	122.3	2/ -6.9	2/ -0.8	2/ -4.7	106	100	104
Tuna	3/ 213.1	3/ 200.8	3/ 209.7	4/ 193.6	4/ 211.1	4/ 207.2	52	49	50
Subtotal	358.7	384.9	357.2	203.2	243.3	234.5	64	61	60
Total	494.3	505.3	466.6	330.6	411.9	442.7	60	55	51

1/ - Includes hake.
2/ - Net exports.
3/ - Includes Puerto Rico.
4/ - Raw imports. Includes landings of foreign-caught fish landed in American Samoa.

Table 3. Per capita consumption of selected fishery products, by quarter, 1968-69

Products	1968					1969				
	1st	2d	3d	4th	Total	1st	2d	3d	4th	Total
	Pounds, edible weight									
Fresh and frozen										
Pacific halibut	.042r	0.036r	0.044r	0.040r	0.162r	.042	0.036	0.042p	0.036p	0.156p
Haddock	.079	.077	.057	.053	.266	.067	.062	.038p	.039p	.206p
Flounders	.126	.122	.116	.113	.477	.116r	.131	.118p	.109p	.474p
Cod	.091	.076	.074	.076	.317	.087	.088	.102p	.098p	.376p
Ocean perch	.127	.080	.079	.070	.356	.138	.088	.118p	.098p	.441p
Pollock & cusk	.011	.007	.008	.013	.039	.009	.007	.008p	.016p	.040p
Subtotal	.476	.398	.378	.365	1.617	.459r	.412r	.426p	.396p	1.693p
Sticks and portions	.358	.306	.319	.345	1.328	.450	.376	.381p	.427p	1.634p
Canned salmon	.137	.137	.194	.194	.662	.165	.166	.174p	.173p	.678p
Canned sardines	.102r	.107r	.110r	.112r	.433r	.075r	.101r	.111p	.069p	.356p
Canned tuna	.409e	.681e	.722e	.505e	2.317e	.447e	.684e	.584e	.582e	2.297e
Total	1.482	1.630	1.723	1.521	6.356	1.596	1.739	1.676p	1.647p	6.658p

p - Preliminary.
r - Revised.
e - Estimates.

Table 4. Sources and disposition of fresh and frozen flounders[1] in the United States, 1960-70

Year	Sources				Disposition		
	Beginning stocks	U.S. landings[2]	Imports	Total	Ending stocks	Apparent consumption Total	Per capita
	Million pounds[3]						Pounds
1960	5.7	43.3	18.7	67.7	7.5	60.3	0.335
1961	7.5	45.4	18.4	71.3	6.1	65.2	.356
1962	6.1	53.0	18.4	77.5	6.2	71.3	.383
1963	6.2	60.3	16.6	83.0	8.0	75.0	.398
1964	8.0	60.1	21.6	89.7	9.0	80.7	.422
1965	9.0	61.3	24.1	94.4	6.6	87.9	.453
1966	6.6	59.5	34.7	100.8	10.2	90.6	.463
1967	10.2	52.1	33.3	95.6	10.7	84.9	.429
1968							
1st quarter	10.7	11.9	9.0	31.6	6.5	25.1	.126
2d quarter	6.5	14.3	9.4	30.3	5.9	24.3	.122
3d quarter	5.9	15.0	9.5	30.4	7.1	23.3	.116
4th quarter	7.1	11.8	11.7	30.6	7.8	22.7	.113
Year	10.7	53.1	39.5	103.3	7.8	95.4	.477
1969							
January	7.8	4.1	3.2	15.1	6.7		
February	6.7	3.1	3.0	12.8	6.0		
March	6.0	4.4	2.7	13.2	4.8		
1st quarter	7.8	11.6	8.8	28.3	4.9	23.4	.116
April	4.9	4.6	2.7	12.2	2.8		
May	2.8	5.0	3.3	11.1	2.6		
June	2.6	3.8	5.1	11.5	2.9r		
2d quarter	4.9	13.5	11.1	29.4r	2.9r	26.5	.131
July	2.9r	4.5	4.8	12.3	4.2		
August	4.2	3.9	3.8	12.0	5.0		
September	5.0r	4.2	4.6	13.8	5.0		
3d quarter	2.9p	12.7	13.2	28.8	5.0	23.8	.118
October	5.0	4.0	5.5	14.5	5.9		
November	5.9	4.0	2.8	12.7	7.2		
December	7.2	3.3	6.7	17.2	9.3		
4th quarter	5.0	11.3	15.0	31.3	9.3	22.1	.109
Year	7.8	49.0	48.1	105.0	9.3	95.7	.474
1970							
January	9.3						

1/- Does not include flounders imported as frozen blocks, used primarily in the manufacture of fish sticks and portions. 2/- Includes estimated Pacific landings. 3/ Edible weight.
p - Preliminary. r-Revised. Figures may not add to total because of rounding.

Table 5. Sources and disposition of fresh and frozen cod (excluding frozen blocks) in the United States, 1962-70

Year	Sources					Disposition		
	Beginning stocks	Landings			Imports	Total	Ending stocks	Apparent consumption	
		Atlantic	Pacific	Total				Total	Per capita
	Million pounds 1/								Pounds
1962	7.1	15.2	1.0	16.2	33.0	56.2	9.7	46.6	0.250
1963	9.7	13.7	1.9	15.6	32.7	58.0	8.9	49.1	.260
1964	8.9	12.6	1.9	14.5	33.5	56.9	6.2	50.7	.265
1965	6.2	11.8	3.0	14.8	33.7	54.7	5.7	49.1	.253
1966	5.7	12.2	3.0	15.2	40.8	61.7	12.7	49.0	.250
1967	12.7	14.0	2.7	16.7	32.1	61.5	6.5	55.0	.278
1968									
1st quarter	6.5	2.9	1.1	4.0	11.3	21.8	3.7	18.1	.091
2d quarter	3.7	5.0	.7	5.7	11.1	20.5	5.3	15.2	.076
3d quarter	5.3	3.9	.3	4.2	11.1	20.6	5.9	14.7	.074
4th quarter	5.9	3.4	.3	3.7	13.2	22.7	7.6	15.2	.076
Year	6.5	15.2	2.4	17.5	46.6	70.7	7.6	63.1	.317
1969									
January	7.6	.9	.2e	1.1e	4.4	13.1	8.0	5.1	
February	8.0	.7	.2e	1.0e	3.9	12.9	8.9	4.0	
March	8.9	1.3	.3e	1.5e	5.4	15.9	7.3	8.5	
1st quarter	7.6	2.9	.7e	3.6e	13.7	24.9	7.3	17.6e	.087e
April	7.3	1.7	.2e	1.8e	6.1	15.3	8.8	6.5	
May	8.8	2.2	.2e	2.4e	5.5	16.7	10.0	6.7	
June	10.0	1.8	.1e	1.9e	4.6	16.4	11.8	4.6	
2d quarter	7.3	5.7	.5e	6.1e	16.1	29.6	11.8	17.8e	.088e
July	11.8	1.5	.4e	1.9e	6.5	20.3	12.3	7.9	
August	12.3	1.4	.1e	1.5e	4.7	18.5	13.3	5.2	
September	13.3	1.9	* e	1.9e	6.0	21.2	13.8	7.5	
3d quarter	11.8	4.8	.5e	5.3e	17.2	34.4	13.8	20.6	.102e
October	13.8	1.8	.1e	1.9e	6.8	22.5	12.7	9.8	
November	12.7	1.1	.1	1.2	3.8	17.7	12.6	5.0	
December	12.6	1.2	.1	1.3	4.2	18.1	13.0	5.1	
4th quarter	13.8	4.1	.2	4.4	14.8	33.0	13.0	20.0	.098
Year	7.6	17.5	1.9	19.4	61.9	89.9	13.0	75.9	.376
1970									
January	13.0	1.1							

1/ - Edible weight. Figures may not add to total because of rounding. e - Estimate.
* - Less than 50,000 pounds. p - Preliminary.

Table 6. Sources and disposition of fresh and frozen haddock[1/] in the United States, 1960-70

Year	Sources				Disposition		
	Beginning stocks	Landings	Imports of fillets	Total	Ending stocks	Apparent consumption: Total	Apparent consumption: Per capita
	Million pounds[2/]						Pounds
1960	10.2	41.7	18.2	70.1	8.1	62.0	0.345
1961	8.1	46.9	21.1	76.1	10.3	65.8	.354
1962	10.3	47.1	20.6	78.0	5.4	72.6	.385
1963	5.4	43.5	19.8	68.7	4.8	63.9	.334
1964	4.8	46.9	19.1	71.5	7.4	64.0	.330
1965	7.4	47.0	17.0	71.4	6.7	64.7	.334
1966	6.9	46.4	21.5	74.8	7.9	66.9	.341
1967	7.9	34.6	21.4	63.9	6.9	57.0	.288
1968							
1st quarter	6.9	5.9	5.9	18.7	3.0	15.7	.079
2d quarter	3.0	8.5	7.9	19.4	4.0	15.4	.077
3d quarter	4.0	6.4	7.5	17.9	6.3	11.7	.058
4th quarter	6.3	3.8	5.3	15.4	4.8	10.5	.053
Year	6.9	24.6	26.7	58.2	4.8	53.3	.267
1969							
January	4.8	.9	.9	6.6	3.3	3.3	
February	3.3	1.0	2.3	6.6	2.8	3.7	
March	2.8	1.7	3.9	8.4	1.9	6.3	
1st quarter	4.8	3.7	7.0	15.5	1.9	13.4	.067
April	1.9	2.5	3.8	8.3	3.5	4.8	
May	3.5	1.6	2.5	7.6	3.5	4.1	
June	3.5	1.9	2.1	7.5	4.0	3.4	
2d quarter	2.0	6.1	8.4	16.5	4.0	12.5	.062
July	4.0	1.1	2.2	7.3	4.5	2.8	
August	4.5	1.1	2.0	7.6	5.7	1.9	
September	5.7	1.2	1.8	8.8	5.9	2.9p	
3d quarter	4.0	3.4	6.1	13.5	5.9	7.6	.038
October	5.9	1.1	2.9	9.9	6.2	3.7	
November	6.2p	.6	1.0	7.9	5.9	2.0	
December	5.9p	.6	2.7	9.1	7.1	2.0	
4th quarter	5.9	2.3	6.6	14.8	7.1	7.7	.039
Year	4.8	15.4	28.1	48.3	7.1	41.2	.206
1970							
January	7.1						

1/ - Excludes haddock imported in frozen blocks and used primarily in the manufacture of sticks and portions. 2/ - Edible weight. p - Preliminary. Figures may not add to total because of rounding.

Table 7. Sources and disposition of Atlantic pollock and cusk

Year	Sources					Disposition		
	Beginning stock[1]	Landings: Pollock	Landings: Cusk	Imports[2]	Total	Ending stock[1]	Apparent consumption: Total	Apparent consumption: Per capita
	Thousand pounds							Pounds
1960	1.7	7.8	0.7	3.7	13.8	1.3	12.5	0.070
1961	1.3	7.5	.7	4.5	14.0	1.4	12.6	.069
1962	1.4	5.7	.7	4.9	12.6	1.0	11.6	.062
1963	1.0	5.1	.7	4.4	11.3	1.0	10.3	.054
1964	1.0	4.7	.8	4.2	10.7	.8	9.9	.052
1965	.8	4.2	.8	3.7	9.4	2.0	7.3	.038
1966	2.0	2.3	.8	4.6	9.8	1.0	8.8	.045
1967	1.0	2.1	.6	4.3	8.1	.9	7.2	.036
1968								
1st quarter	.9	.5	.2	1.2	2.8	.6	2.2	.011
2d quarter	.6	.3	.1	.9	2.0	.6	1.4	.007
3d quarter	.6	.4	.1	1.2	2.3	.7	1.6	.008
4th quarter	.7	.9	.1	2.1	3.7	1.0	2.7	.013
Year	.9	2.3	.5	5.4	8.9	1.0	7.9	.039
1969								
January	.9	.5r	*	.4	1.8	1.0	.7	
February	1.0	.3r	*	.3	1.6	1.1	.5	
March	1.1	.4r	*	.3	1.8	.9	.9	
1st quarter	.9	1.2r	*	1.0	3.0	.9	2.1	.010
April	.9	.2r	*	.4	1.5	.8	.7	
May	.8	*	*	.4	1.2	.7	.5	
June	.7	.2r	*	.2	1.1	.7	.4	
2d quarter	.9	.4r	*	1.0	2.3	.7	1.6	.008
July	.7	.2	*	.4	1.3	.7	.6	
August	.7	.2	*	.5	1.4	.7	.7	
September	.7	.3	*	.4	1.4	.9	.5	
3d quarter	.7	.7	*	1.3	2.8	.9	1.9	.009
October	.9	.3	*	.8	2.1	1.1	1.0	
November	1.1	.5	*	.5	2.1	1.3	.8	
December	1.3	.7	*	1.3	3.3	1.5p	1.8p	
4th quarter	.9	1.5	*	2.7	5.0	1.5p	3.5p	.017
Year	.9	3.8	.1	5.9	10.7	1.5p	9.2p	.045

1/ - Pollock only. 2/ - Edible weight. r - Revised. p - Preliminary.
* - Less than 50,000 pounds.

Table 8. Sources and disposition of ocean perch (excluding blocks) in the United States, 1962-70

Year	Sources						Disposition		
	Beginning stocks	Landings: Atlantic	Landings: Pacific	Landings: Total	Imports	Total	Ending stocks	Apparent consumption: Total	Apparent consumption: Per capita
	Million pounds 1/								Pounds
1962	13.0	37.2	5.2	42.4	19.5	74.8	13.5	61.4	0.330
1963	13.5	32.5	7.1	39.6	21.6	74.6	16.3	58.3	.309
1964	16.3	26.8	6.3	33.1	22.9	72.4	15.4	57.0	.298
1965	15.4	25.3	8.5	33.8	25.7	74.9	12.2	62.7	.325
1966	12.2	24.4	6.7	31.1	41.6	84.9	17.9	67.0	.342
1967	17.9	21.5	6.2	27.7	36.3	81.8	18.0	63.8	.319
1968									
1st quarter	18.0	3.8	.3e	4.1e	10.5	32.7e	7.3	25.4	.127e
2d quarter	7.3	5.0	1.0e	6.1e	6.2	19.6e	3.6	16.0e	.080e
3d quarter	3.6	6.3	1.7e	8.1e	16.5	28.2e	12.4	15.9e	.079e
4th quarter	12.4	3.5	.7e	4.2e	17.1	33.7e	19.7	14.0e	.070e
Year	18.0	18.7	3.8e	22.4e	50.4	90.9e	19.7	71.2e	.356e
1969									
January	19.7	1.0	*	1.1e	6.5	27.3e	15.3	11.9	
February	15.3	.9	.1e	1.0e	2.2	18.5e	12.3	6.2	
March	12.3	.9	.1e	1.0e	4.9	18.2e	8.6	9.5	
1st quarter	19.7	2.8	.2e	3.1e	13.6e	36.4e	8.6	27.7	.138
April	8.6	1.9	.1	2.0	1.7	12.3	6.1	6.2	
May	6.1	1.7	.5	2.2	1.7	10.0	4.8	5.2	
June	4.8	1.9	.5	2.4	3.9	11.1	4.9	6.2	
2d quarter	8.6	5.5	1.1	6.5	7.4	22.5	4.9	17.6	.088
July	4.9	1.9	.5	2.4	7.8	15.1	6.6	8.5	
August	6.6	2.0	.6	2.5	6.6	15.7	7.8	8.0	
September	7.8	2.0	.5	2.5	8.9	19.1	11.7	7.4	
3d quarter	4.9	5.9	1.5	7.4	23.3	35.6	11.7	23.9	.118
October	11.7	1.1	.5	1.6	7.5	20.7	13.9	6.9	
November	13.9	.9	.7	1.6	4.9	20.3	15.5	4.8	
December	15.5	1.1	.3	1.4	7.6	24.5	16.4	8.2	
4th quarter	11.7	3.1	1.5	4.6	20.0	36.2	16.4	19.9	.098
Year	19.7	17.3	4.3	21.6	64.2	105.4	16.4	89.1	.441
1970									
January	16.4								

1/ - Edible weight. Figures may not add to total because of rounding. e - Estimate.
* - Less than 50,000 pounds. p - Preliminary.

Table 9. Consumption of fresh and frozen groundfish fillets, 1969

Species	Source						Disposition		
	Frozen				Fresh				
	Beginning stocks	Freezings from landings	Imports	Ending stocks	Landings	Imports	Frozen	Fresh	Total
	Million pounds, edible weight								
Flounders	7.8	2.5	46.8	9.3	46.6	1.4	47.7	48.0	95.7
Cod	7.6	1.4	54.9	13.0	18.0	7.0	50.9	25.0	75.9
Haddock	4.8	3.4	23.5	7.1	12.0	4.5	24.7	16.5	41.2
Ocean perch	19.7	15.3	64.2	16.4	6.3	.0	82.8	6.3	89.1
Pollock & cusk	.9	1.3	5.0	1.5	1.3	1.0	5.8	2.3	8.1
Total	40.8	23.9	194.4	47.3	84.2	13.9	211.9	98.1	310.0

REVIEW AND OUTLOOK

GROUNDFISH

Review--1969

Supply

Total supplies of groundfish (beginning stocks, landings, and imports of flounders, haddock, cod, ocean perch, pollock and cusk), excluding fish blocks, were 357 million pounds (edible weight) in 1969--25 million pounds more than in 1968. Landings dropped 12 million pounds. Beginning stocks were 2.2 million pounds lower than the year before. The increase in imports was the main contributor to the increased supplies--168.6 million pounds in 1968 and 208.2 million pounds in 1969.

Landings Dropped, Except for Cod and Pollock

Landings of haddock were down 9.2 million pounds, edible weight; and flounders were down 4 million pounds. Cod and pollock were the major species with higher landings--up 2 and 1 million pounds respectively from 1968.

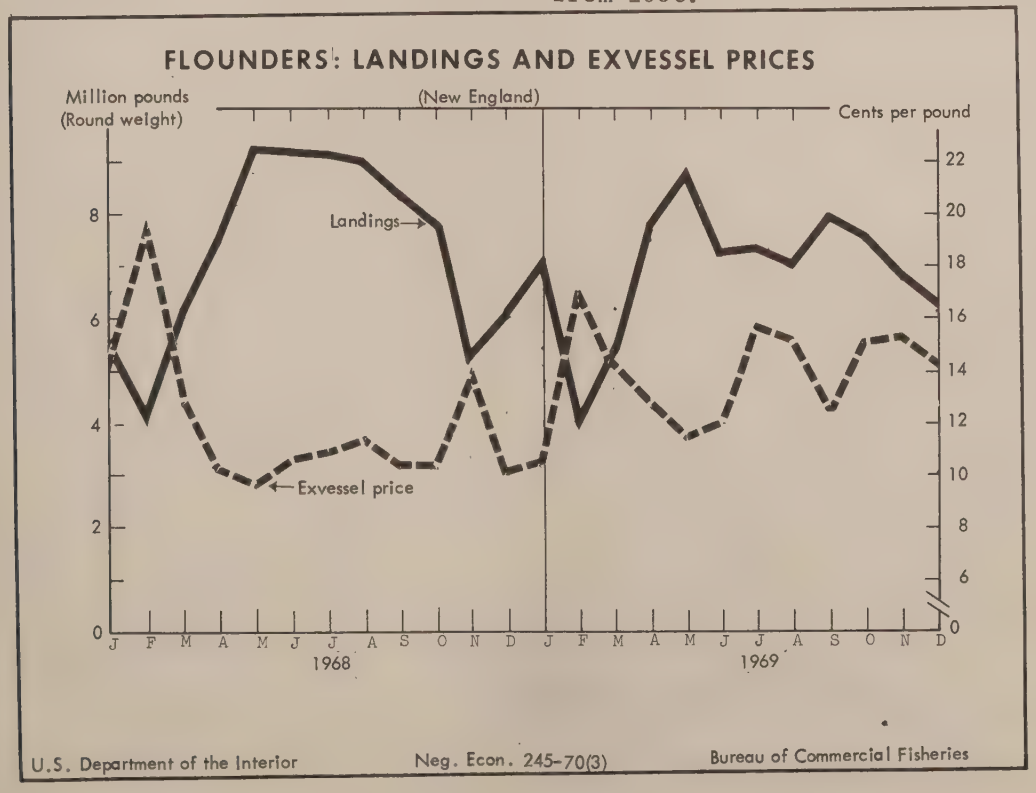


Figure 1

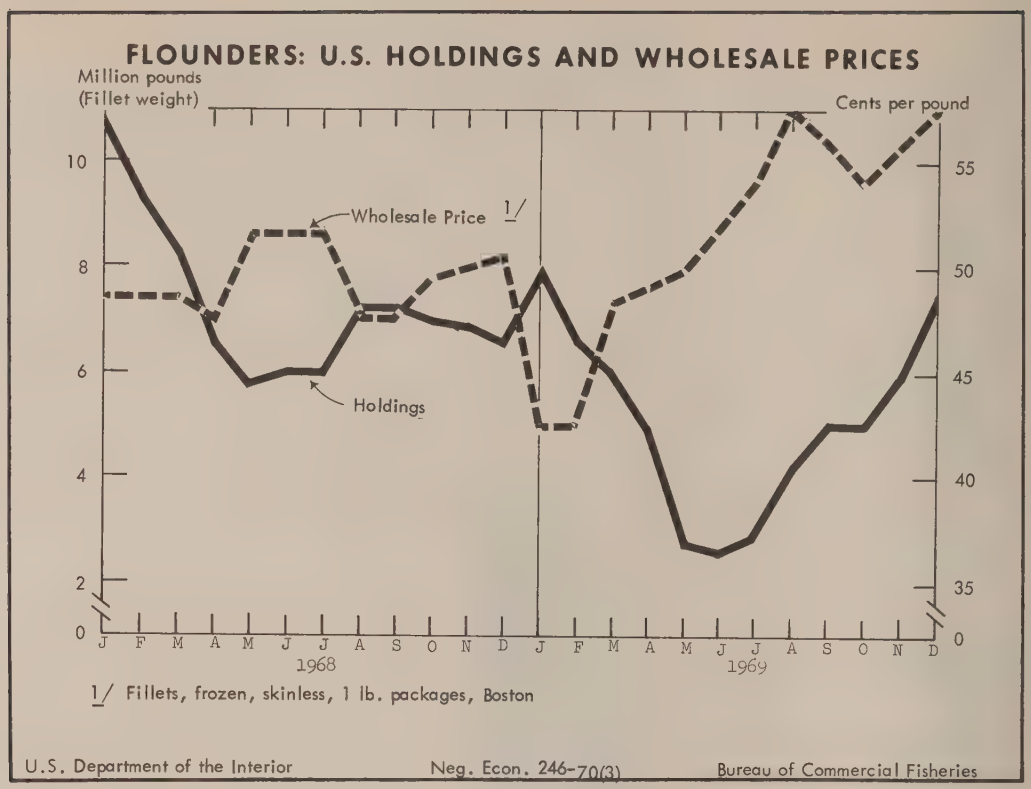


Figure 2

Imports Increased for all Species

Imports of every groundfish increased in 1969 (tables 4 to 8). Cod had the biggest increase (up 15.3 million pounds) and ocean perch next (up 13.8 million pounds). An increase of almost 9 million pounds of imported flounders offset the decline in landings and holdings of flounders, consequently, consumption of flounders remained stable. The 28 million pounds of haddock imports in 1969 were only 1.4 million pounds more than in 1968, not enough to fill the gap caused by lower landings. The result was a 12-million-pound decline in consumption.

Imports of the six major groundfish groups were 58 percent of the total quantity available (landings, beginning stocks, and imports) in 1969. In 1968, imports were 51 percent (table 2).

Total Holdings Up Slightly

The change in cold storage holdings from the beginning to the end of 1969 resulted in a net increase of 6.5 million pounds (tables 4 to 8). The buildup of holdings was heaviest for cod. Cod holdings were 13 million pounds--5.4 million pounds higher than the carry-over at the beginning of last year. Although there were shortages of haddock, holdings increased to 7.1 million pounds at the end of 1969--higher than 1968 by 2.3 million pounds. The heavy demand for ocean perch reduced holdings from 19.7 million pounds at the beginning of 1969 to 16.4 million pounds at the end of 1969.

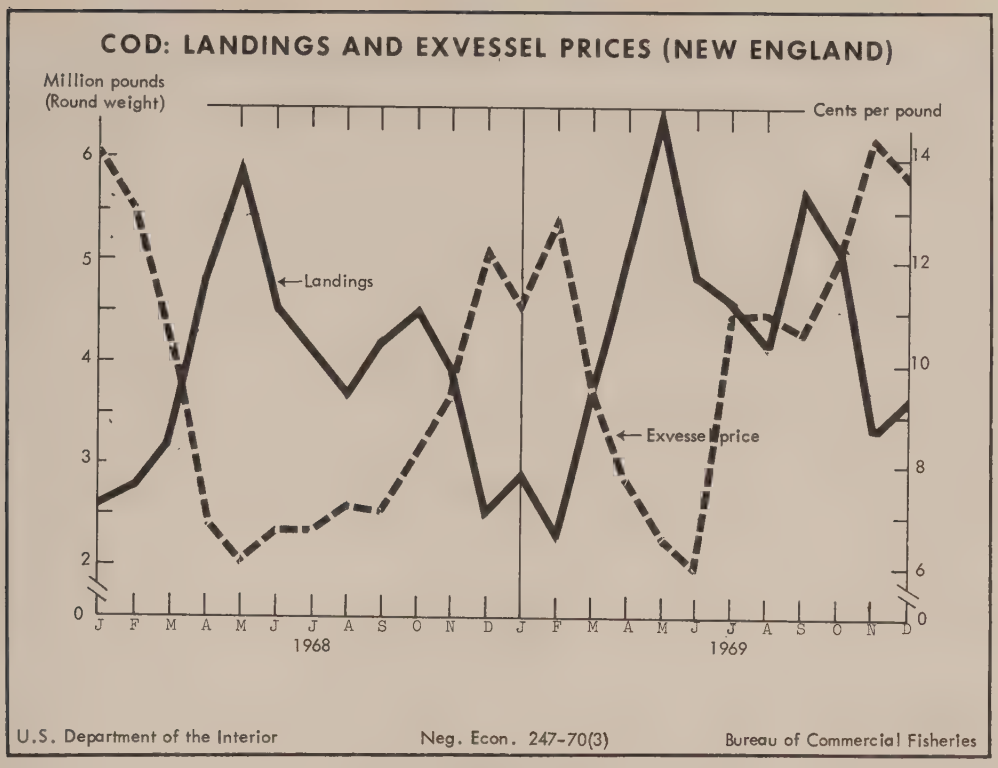

COD: LANDINGS AND EXVESSEL PRICES (NEW ENGLAND)
Million pounds
(Round weight)
Cents per pound
Landings
Exvessel price
J F M A M J J A S O N D J F M A M J J A S O N D
1968
1969
U.S. Department of the Interior
Neg. Econ. 247-70(3)
Bureau of Commercial Fisheries

Figure 3

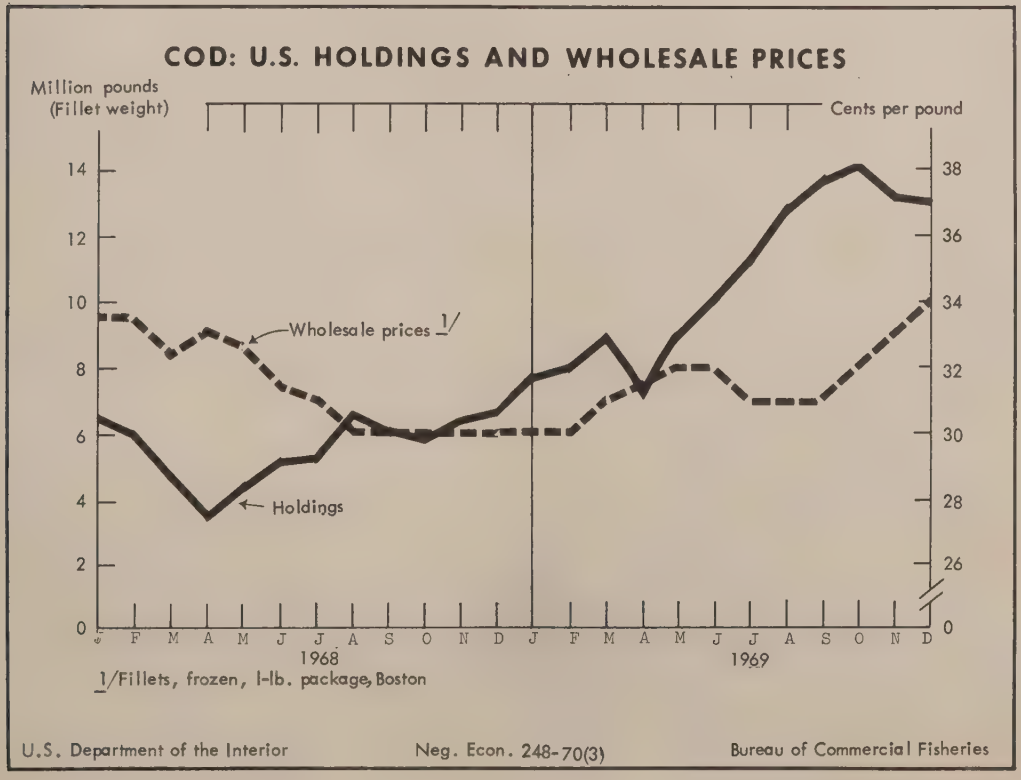

COD: U.S. HOLDINGS AND WHOLESALE PRICES
Million pounds
(Fillet weight)
Cents per pound
Wholesale prices 1/
Holdings
J F M A M J J A S O N D J F M A M J J A S O N D
1968
1969
1/Fillets, frozen, 1-lb. package, Boston
U.S. Department of the Interior
Neg. Econ. 248-70(3)
Bureau of Commercial Fisheries

Figure 4

Consumption Increased

Total U.S. consumption of 310 million pounds of groundfish fillets and steaks (flounders, haddock, cod, ocean perch, pollock, and cusk) in 1969 was 6.5 percent up from a year earlier (table 9). This consumption was achieved despite record-high prices and record-low supplies of haddock.

The increase of 18 million pounds in the consumption of ocean perch slightly more than offset the decline in sales of haddock (tables 6 and 8). The increase in consumption of cod from 63 million pounds in 1968 to 76 million pounds in 1969 (table 5) accounted for most of the increase in the total consumption of groundfish products, excluding fish sticks and portions. Consumption of flounders remained almost unchanged (tables 4 and 7).

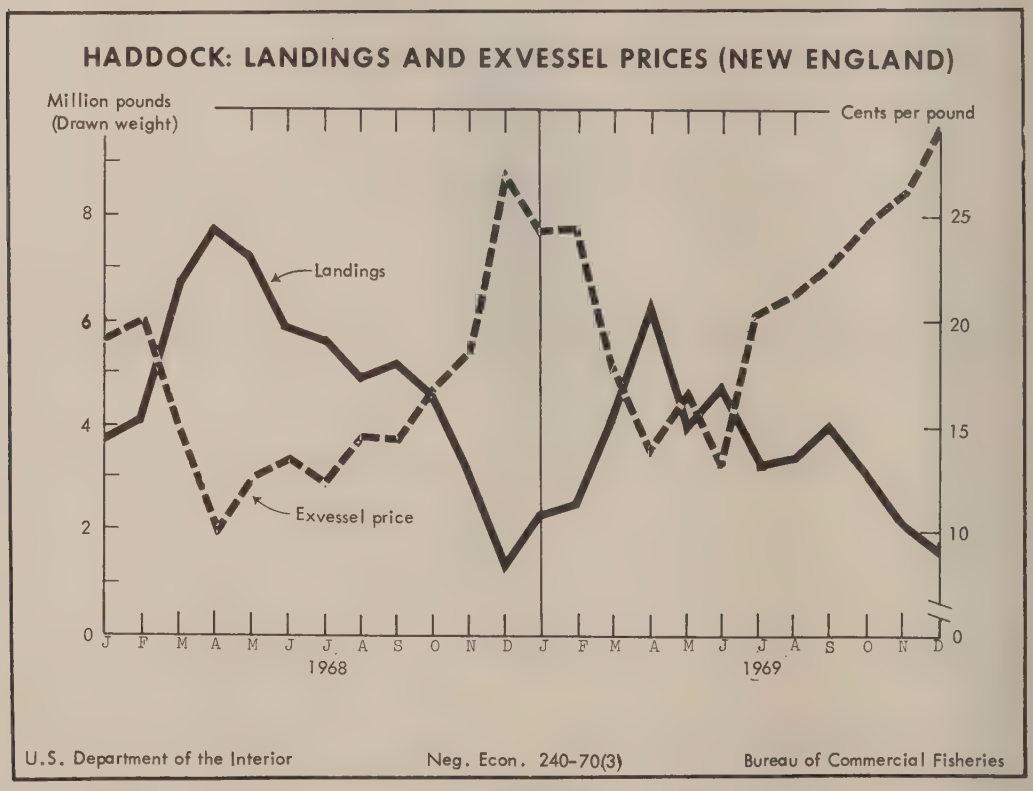


Figure 5

Price-Consumption Relationships

The price-sales variation of flounders, cod, and ocean perch present a different pattern of relationship and require separate interpretations. In 1969, flounder prices increased by 30 percent, while consumption of flounders increased by 0.3 percent. The reason the consumption of flounders did not drop in response to its price increase was because flounders were used, in part, to make up for the shortage of haddock. Flounders are a close substitute for haddock.

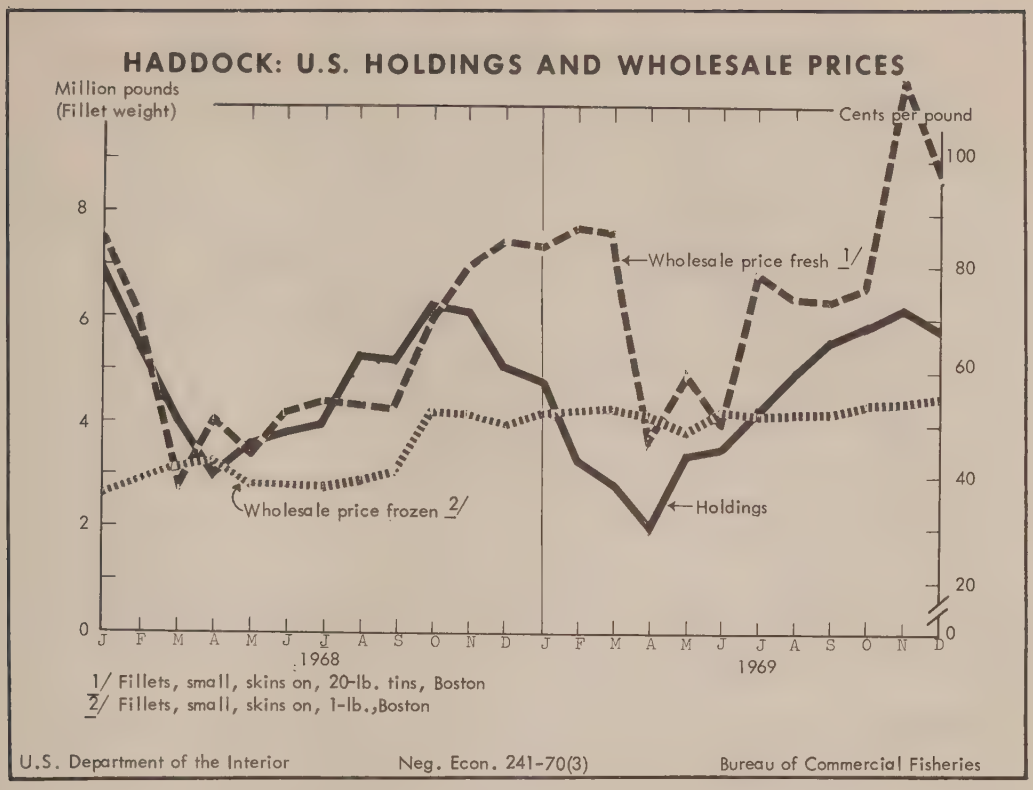


Figure 6

Average annual wholesale prices of cod fillets for the last 2 years stayed at about 31.5 cents a pound. Sonsumption of cod increased by 20 percent in 1969. This increase in consumption was partly due to low prices of cod in comparison with prices of other commodities, and partly due to substitution for haddock.

Wholesale prices of ocean perch increased by 11 percent (from 27.1 cents to 30.2 cents in 1969). Its consumption, instead of decreasing, increased by 25 percent. With the exception of pollock, ocean perch is the lowest priced groundfish. Under the inflationary pressure of 1969, many housewives were price-conscious. This was a year for fish eaters to turn to the lower priced items. Apparently, some of them switched to ocean perch.

Fresh and Frozen Markets

Most of the domestic landings of flounders and cod are for the fresh market; only 5 to 7 percent are frozen each year. In 1969, about 20 percent of haddock landings and over 70 percent of ocean perch landings were frozen. About one-half of pollock landings were consumed fresh (table 9).

In 1969, for the first time, imports of groundfish products were reported separately as fresh or frozen. All ocean perch and almost all flounders were imported in frozen form. Only about 10 percent of cod and pollock and 16 percent of haddock were imported as fresh products. As usual, fresh fish products were mostly imported from Canada.

In 1969, out of 310 million pounds of groundfish consumed, 98 million pounds, or 32 percent, were sold in fresh form. Half of flounders, 40 percent of haddock, and almost one-third of cod and pollock were sold fresh, while over 90 percent of ocean perch were delivered as frozen products.

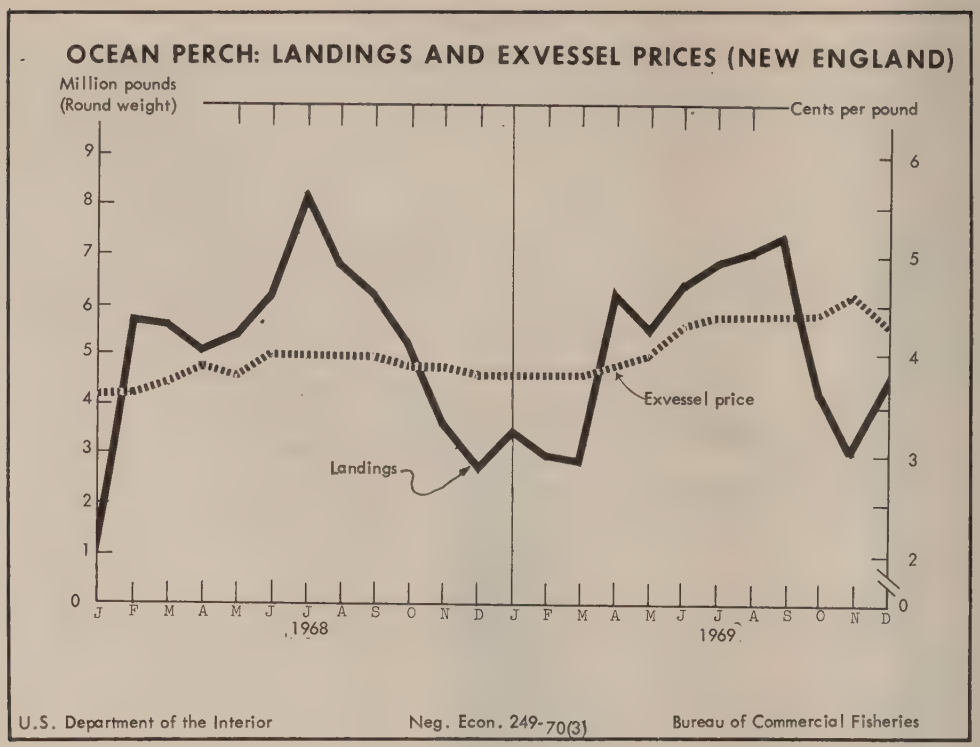

OCEAN PERCH: LANDINGS AND EXVESSEL PRICES (NEW ENGLAND)
Million pounds
(Round weight)
Cents per pound
Exvessel price
Landings
J F M A M J J A S O N D J F M A M J J A S O N D
1968
1969
U.S. Department of the Interior
Neg. Econ. 249-70(3)
Bureau of Commercial Fisheries

Figure 7

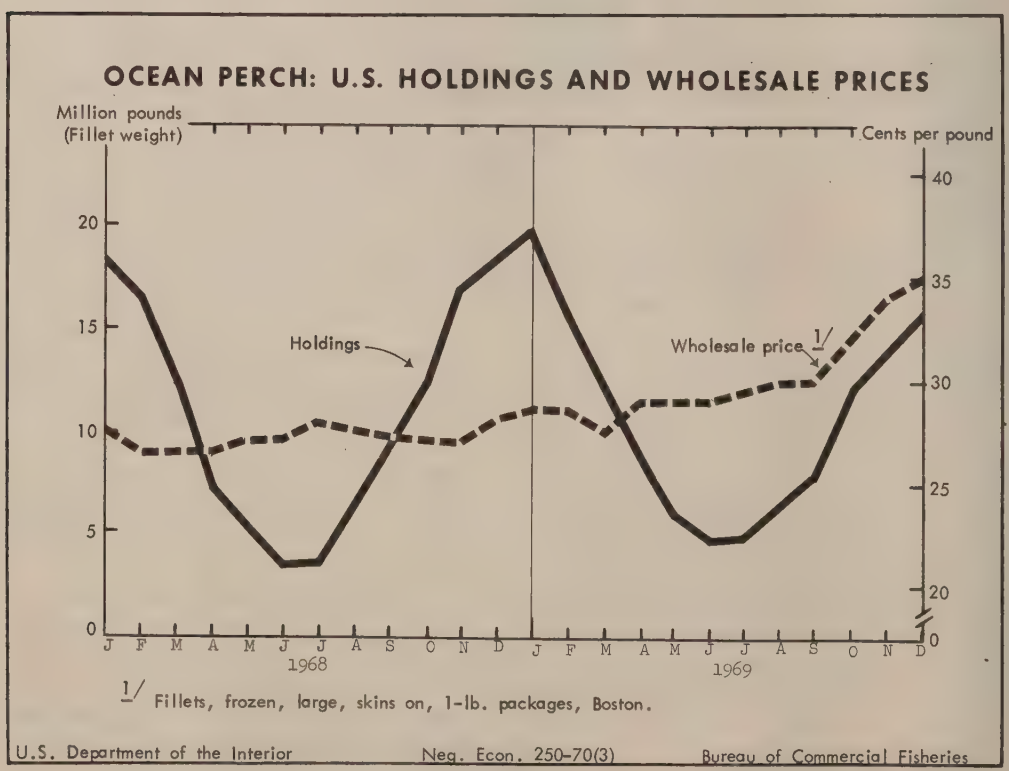

OCEAN PERCH: U.S. HOLDINGS AND WHOLESALE PRICES
Million pounds
(Fillet weight)
Cents per pound
Holdings
Wholesale price 1/
J F M A M J J A S O N D J F M A M J J A S O N D
1968
1969
1/ Fillets, frozen, large, skins on, 1-lb. packages, Boston.
U.S. Department of the Interior
Neg. Econ. 250-70(3)
Bureau of Commercial Fisheries

Figure 8

Table 10. Monthly wholesale prices of fresh and frozen cod, 1969

Month	Fresh fillets 1/	Frozen fillets 2/
	----Cents per pound---	
January	60	30
February	69	30
March	65	31
April	55	31
May	55	32
June	54	32
July	62	31
August	61	31
September	60	31
October	65	32
November	76	33
December	71	34

1/ - New York City Fulton Market prices.
2/ - 1-lb. package, Boston.

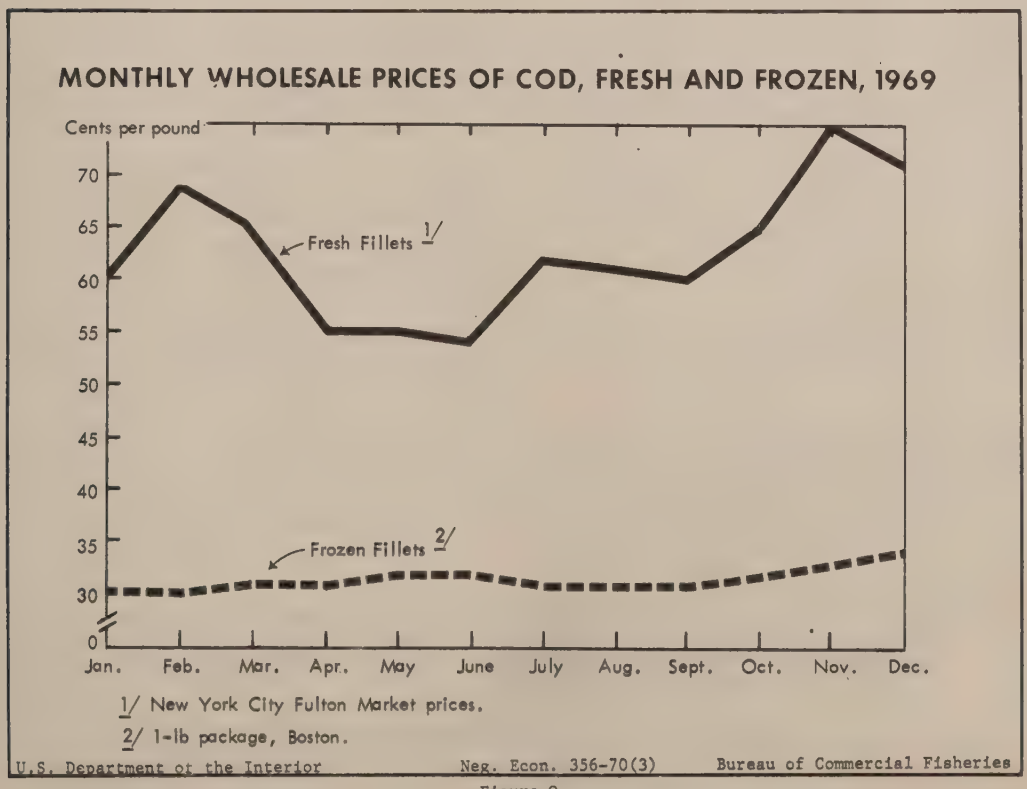


Figure 9

OUTLOOK for GROUNDFISH--1970

Demand

Our forecast for 1970 indicates an increase in the sales of flounders, cod, and pollock, while sales of haddock will drop even further. The decline in haddock consumption due to low production, however, will not be big enough to offset the gains to be made in other groundfish. A net increase in consumption of 5 to 8 million pounds is predicted for the whole year.

Demand in the First Half-Year Expected To Be Slightly Higher Than a Year Ago

The consumption level is expected to be 160 to 162 million pounds in the first half of this year--about 2 to 3 million pounds higher than the previous year.

The cutback in haddock supplies will affect consumption in the third and fourth quarters this year when regulatory areas will be closed as soon as 80 percent of the haddock catch quota is reached.

Cod--An Exception To Price Increases

Cod may be an exception to the strength of the groundfish prices. Heavy holdings may keep cod prices to around 34 cents a pound for a while. Consumption of cod in 1970 is expected to better last year's level of 75.9 million pounds by 1 to 2 million pounds.

Ocean Perch Consumption Expected To Stay High

The low wholesale price of ocean perch (frozen fillets averaged 30 cents a pound in 1969), compared with the prices of flounders (51.4 cents), haddock (52.3 cents), and cod (31.4 cents), appealled to price-conscious consumers last year. During the first quarter of this year prices of ocean perch increased to 35.5 cents a pound. We expect a continuous heavy consumption of ocean perch about 90 to 94 million pounds in 1970--higher than a year ago by 2 to 4 million pounds as haddock gets scarcer and prices of flounder and haddock continue to stay at high levels.

Fresh Market Has Tendency To Grow

In recent years there has been a decline in the portion of groundfish landings that were frozen. Except for ocean perch, most of the domestically landed groundfish went directly to the fresh market. Even freezings of ocean perch declined from 74 percent in 1968 to 71 percent in 1969. The decline of groundfish freezings and the increase in the prices of fresh fish support a growing fresh market. The trend also offers some insight on the future domestic market.

Improvement of transportation facilities and insulated packing will further expand the sales of fresh products to areas farther away from the coast. The fresh market is one field where imports will have more difficulties in competing.

Table 11. Monthly wholesale prices of fresh and frozen flounders, 1969

Month	Fresh fillets 1/		Frozen fillets 2/
	Yellowtail	Grey sole	Flounder
	Cents per pound		
January	95	152	43
February	99	135	43
March	102	146	48
April	81	115	49
May	87	118	49
June	86	114	52
July	95	119	54
August	94	115	58
September	92	120	56
October	95	127	54
November	101	151	56
December	91	137	58

1/ - New York City Fulton Market prices.
2/ - Skins on, 1-lb package, Boston.

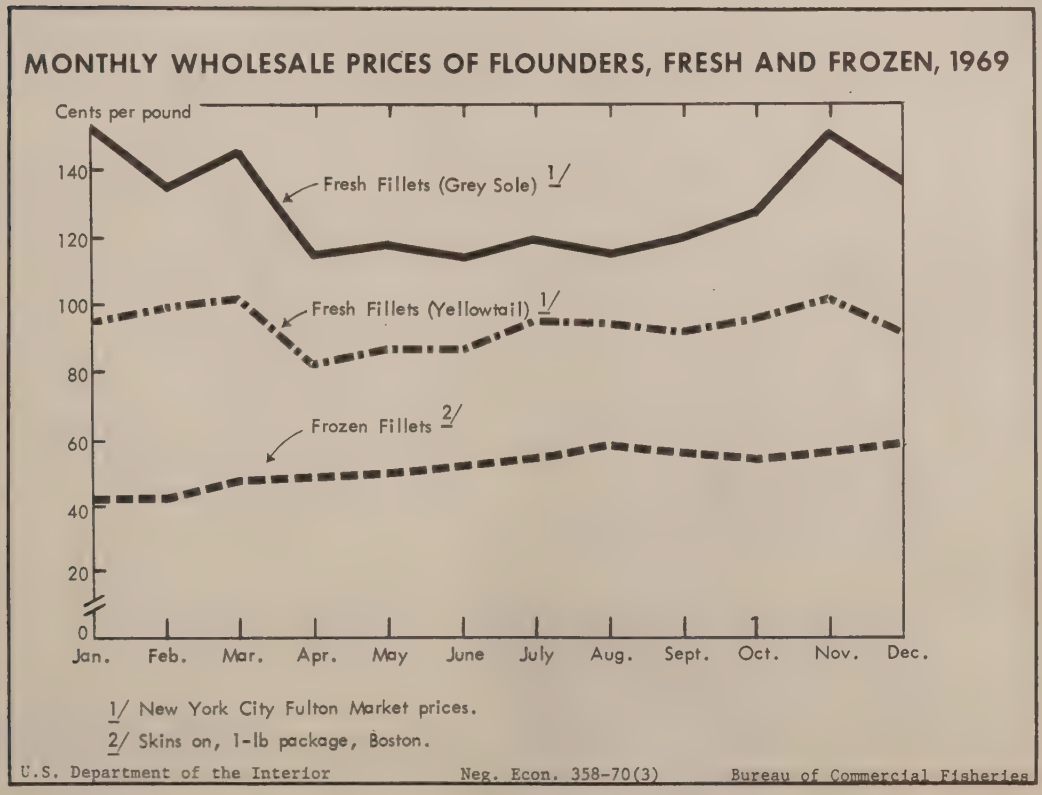


Figure 10

Table 12. Monthly wholesale prices of fresh and frozen haddock, 1969

Month	Fresh fillets[1/]	Frozen fillets[2/]
	- - -Cents per pound - -	
January	84	52
February	87	53
March	87	53
April	56	52
May	59	51
June	50	51
July	79	51
August	74	52
September	73	52
October	76	54
November	119	54
December	98	55

1/ - Skins on, 20-lb. tins, Boston.
2/ - Skins on, 1-lb. package, Boston.

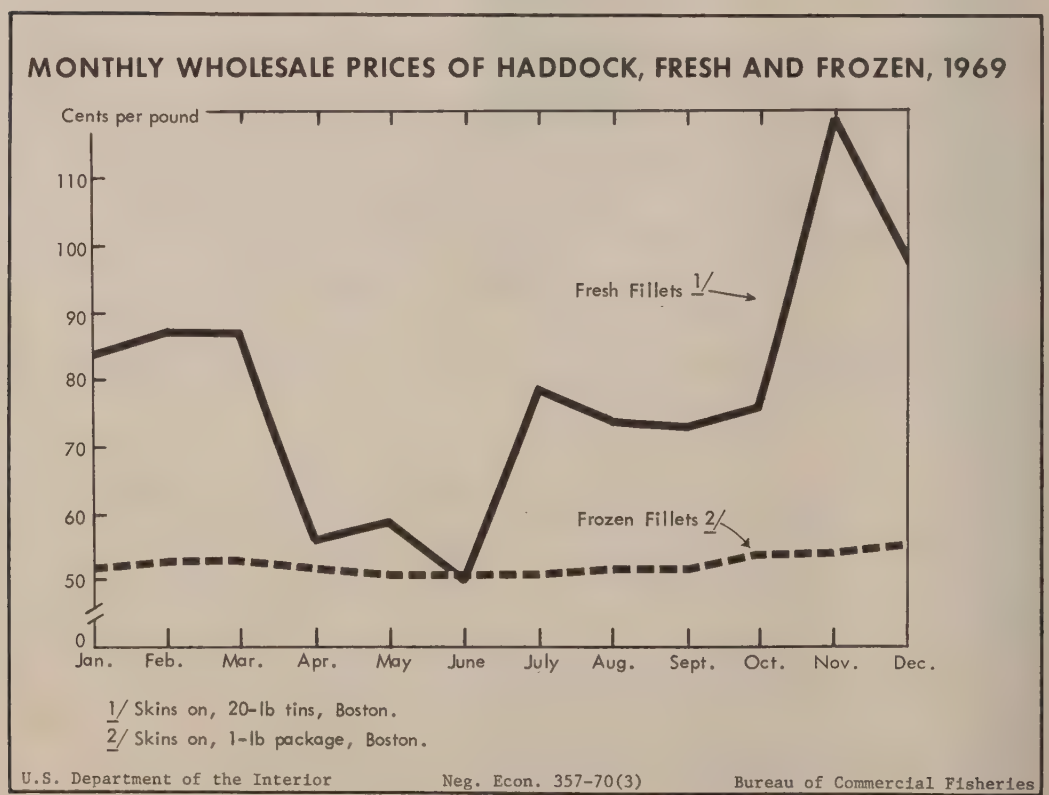


Figure 11

Except for haddock, the abundance levels of groundfish taken by New England fishermen will be unchanged in 1970 according to biologists of the Bureau's Biological Laboratory in Woods Hole, Mass. Cod and ocean perch will be at levels equal to or greater than in 1969. Yellowtail is the only flounder species that has signs indicating a lower abundance in the years immediately ahead.

We expect that supplies of groundfish (landings, beginning stocks, and imports) this year will be slightly higher than a year ago. In the first half of this year, 190 to 195 million pounds, edible weight, will be available--about 2 to 3 million pounds higher than a year ago. The increase is the result of a large volume of beginning holdings--about 7 million pounds greater than in 1969.

Total supplies for 1970 are expected to be about 370 to 375 million pounds, edible weight--higher than last year by 12 to 14 million pounds with only slight changes in imports.

Cod Landings Expected To Be Lower

Much effort was expended in fishing for cod last year. The effect of a stable price level in the face of rising costs may take some of the zest out of cod fishing this year. We expect only a moderate increase in cod prices and a slight decline in landings. Landings in the first quarter of this year indicated a decline from the year before. For 1970, about 92 to 94 million pounds, edible weight, are expected to be caught--lower than last year by 3 to 4 million pounds.

Haddock Conservation Regulations

New regulations for conservation of haddock stocks on offshore banks of New England became effective on January 7, 1970. The disastrous decline of haddock on the fishing banks made it necessary to take drastic regulatory action to rebuild the stocks. Fishery biologists expect little recruitment into the fishery for at least 3 more years.

Quotas were established for two areas off New England and Canada. They are 12,000 metric tons, or 26.5 million pounds, for Georges Bank and the Gulf of Maine and 18,000 metric tons, or 39.7 million pounds, for Browns Bank. Unrestricted fishing for haddock may continue until 80 percent of the established quotas are taken from the two areas. When announced, the season closure will terminate haddock fishing for the rest of the year, except for incidental catches while fishing for other species.

Present mesh-size regulations will remain. During March and April, however, certain spawning areas were closed to all types of gear capable of taking groundfish.

Haddock Supply Limited

The haddock fishing quota of 66 million pounds for all countries from the two areas is equivalent to 23.2 million pounds in edible weight. U.S. landings are not expected to be higher than 13 million pounds. More imports from Iceland and the Scandinavian countries are expected to fill the gap created by lower Canadian landings and drop Canadian exports of haddock to this country. Adding to landings and imports the 7-million-pound storage holdings, and allowing for a moderate amount of carryover for the next year, we believe the availability of haddock for consumption will be at most 36 million pounds. About 24 to 26 million pounds are expected to be sold in the first half of the year.

Table 13. First-of-month cold storage holdings of flounder fillets in the United States and Canada, 1968-70

Month	United States			Canada 1/			Total		
	1968	1969	1970	1968	1969	1970	1968	1969	1970
	Million pounds								
January	10.7	7.8	9.3	7.0	3.5	3.1	17.6	11.3	12.4
February	9.1	6.7	8.9	6.2	2.8	2.2	15.2	9.4	11.1
March	8.2	6.0	8.1	4.6	2.2	2.3	12.8	8.2	10.4
April	6.5	4.9	7.3	3.8	1.6	2.4	10.3	6.4	9.7
May	5.7	2.8	8.3	3.2	1.5		8.9	4.3	
June	5.9	2.6		5.3	2.2		11.1	4.8	
July	5.9	2.9		5.6	3.1		11.6	6.0	
August	7.1	4.2		5.3	3.3		12.4	7.5p	
September	7.2	5.0		6.0	3.9		13.2	8.9	
October	7.1	5.0		5.8	2.8		12.9	7.8	
November	7.0	5.9		5.3	2.9		12.3	9.0	
December	6.7	7.3		4.0	3.8		10.6	11.0	

1/ - Industry Division, Dominion Bureau of Statistics, Ottawa.
p - Preliminary.
Figures may not add to total because of rounding.

Table 14. Monthly exvessel, wholesale and retail prices of flounders, 1968-70

Month	Exvessel price 1/								
	Yellowtail			Blackback & lemon sole			Sea dab		
	1968	1969	1970	1968	1969	1970	1968	1969	1970
	Cents per pound								
January	13.3	9.5	18.8	24.9	15.0	21.9	17.9	14.4	20.1
February	18.3	16.7	21.3	23.3	19.1	24.9	20.5	16.7	18.9
March	12.0	14.2	21.5	21.6	15.0	17.9	18.5	12.5	15.5
April	11.8	14.0		12.1	10.9		12.5	9.0	
May	9.5	12.4		11.8	10.7		10.9	9.8	
June	11.7	12.8		11.2	11.1		11.0	9.8	
July	8.0	14.6		15.5	18.2		11.9	15.3	
August	9.2	14.3		18.2	20.3		14.5	13.4	
September	9.0	12.3		16.8	13.3		13.3	11.6	
October	9.5	14.7		14.4	15.8		12.2	14.0	
November	14.7	14.7		10.7	15.7		11.9	16.3	
December	9.2	13.4		13.5	16.8		16.9	16.6	
Average	11.3	13.6		16.2	15.2		14.3	13.3	

Month	Wholesale price			Retail price 3/					
	Fillets frozen 2/			Fillets, fresh			Drawn, fresh		
	1968	1969	1970	1968	1969	1970	1968	1969	1970
	Cents per pound								
January	38.5	42.5	57.5	102.5	104.0	131.4	62.2	61.0	72.0
February	38.5	42.5	53.5	103.5	101.5	137.8	64.5	64.3	74.3
March	38.5	48.0	54.0	117.3	131.8	138.6	69.0	66.3	75.2
April	37.5	48.5		102.2	116.5	135.2	59.6	57.4	72.8
May	41.5	49.0		99.0	109.0		57.2	52.5	
June	41.5	52.0		100.2	111.8		56.7	59.0	
July	41.5	54.4		99.4	112.3		56.3	60.2	
August	37.5	58.0		99.0	115.1		58.5	71.5	
September	37.5	55.5		94.4	115.7		62.3	68.2	
October	39.5	54.0		99.8	112.4		63.0	64.5	
November	40.0	55.5		105.1	119.0		60.5	67.8	
December	40.5	57.5		99.5	119.5		59.8	63.5	
Average	39.4	51.4		101.8	114.1		60.8	63.0	

1/ - At New Bedford, Mass.
2/ - Skinless, 1-lb. package, at Boston, Mass.
3/ - Most general prices at New York, N.Y.

Table 15. First-of-month cold storage holdings of cod fillets in the United States and Canada 1968-70

	United States			Canada[1]			Total		
	1968	1969	1970	1968	1969	1970	1968	1969	1970
	Million pounds								
January	6.5	7.6	12.9	1.9	4.8	3.0	8.4	12.4	15.9
February	6.1	8.0	11.9	1.8	4.6	2.8	7.8	12.6	14.7
March	4.6	8.9	10.8	1.7	4.6	4.0	6.3	13.5	14.8
April	3.7	7.3	9.1	1.8	3.2	3.0	5.5	10.5	12.1
May	4.5	8.8	9.2	3.1	3.3		7.6	12.1	
June	5.2	10.0		4.4	4.6		9.6	14.6	
July	5.3	11.8		5.4	5.2		10.7	17.0	
August	6.6	12.3		5.9	6.9		12.5	19.2	
September	6.1	13.3		5.9	6.1		12.0	19.4	
October	5.9	13.8		5.9	6.5		11.8	20.5	
November	6.4	12.7		4.7	4.9		11.1	17.4	
December	6.7	12.6		4.8	4.0		11.4	16.6	

1/ - Industry Division, Dominion Bureau of Statistics, Ottawa.
Figures may not add to total because of rounding.
p - Preliminary.

Table 16. Monthly exvessel, wholesale, and retail prices of cod, 1968-70

Month	Exvessel price[1]			Wholesale price[2]			Retail price[3]					
							Fillet fresh			Steak fresh		
	1968	1969	1970	1968	1969	1970	1968	1969	1970	1968	1969	1970
	Cents per pound											
January	14.1	11.1	15.7	33.7	30.0	34.0	87.6	82.8	92.5	72.8	69.5	83.1
February	12.9	12.8	14.7	33.6	30.0	34.5	82.3	80.8	95.0	69.5	72.8	83.0
March	10.2	9.7	15.0	32.5	31.0	34.5	86.8	89.8	98.0	75.5	72.1	78.0
April	6.8	7.6		33.0	31.4	34.5	85.1	88.2	104.0	69.4	69.0	80.2
May	6.0	6.6		32.5	31.5		80.9	84.0		67.0	65.8	
June	6.7	6.0		31.5	31.5		80.2	84.5		67.4	67.0	
July	6.7	10.9		31.1	31.4		80.8	88.6		67.4	70.6	
August	7.2	11.0		30.0	31.3		76.5	93.1		67.0	68.5	
September	7.1	10.6		30.0	30.8		80.0	89.1		69.8	69.6	
October	8.4	12.0		30.0	31.7		81.0	86.4		72.4	67.0	
November	9.4	14.4		30.0	32.9		83.0	99.0		71.5	72.6	
December	11.9	13.7		30.0	33.5		87.8	92.8		70.8	78.5	
Average	8.9	10.5		31.5	31.4		82.7	88.3		70.0	70.2	

1/ - Average at principal New England ports.
2/ - Fillet, frozen, 1-lb. package, at Boston, Mass.
3/ - At New York City Fulton Market.

Table 17. Haddock landings in the New England Region[1/] by month and quarter, 1968-70

Month	1968			1969			1970		
	Large	Scrod	Total	Large	Scrod	Total	Large	Scrod	Total
	Million pounds[2/]								
January	2.1	2.1	4.2	1.7	1.0	2.7	1.1	0.1	1.2
February	2.2	2.7	4.9	1.6	1.2	2.8	1.0	.2	1.2
March	3.8	4.0	7.8	2.8	2.1	5.0	1.3	.6	2.0
1st quarter	8.1	8.7	16.8	6.1	4.3	10.4	3.4	.9	4.4
April	4.3	4.7	9.0	4.3	2.9	7.2			
May	4.2	4.1	8.3	3.2	1.5	4.7			
June	3.9	2.9	6.8	3.9	1.4	5.4			
2d quarter	12.4	11.7	24.1	11.4	5.9	17.2			
July	3.9	2.7	6.6	2.3	.7	3.0			
August	3.1	2.5	5.7	2.5	.7	3.2			
September	3.9	2.1	6.0	2.8	.7	3.5			
3d quarter	10.9	7.3	18.3	7.6	2.1	9.7			
October	3.4	1.8	5.2	2.5	.5	3.0			
November	2.4	1.2	3.6	1.5	.3	1.8			
December	1.2	.7	1.9	1.4p	.2p	1.6p			
4th quarter	7.0	3.7	10.7	5.4	1.0	6.4			
Year	38.4	31.6	70.0	30.4	13.4	43.8			

1/ - Accounts for over 99 percent of U.S. haddock landings.
2/ - Round weight.
Figures may not add to total because of rounding.
p - Preliminary.

Table 18. Haddock landings, value and average exvessel price, New England by size of fish annually for 1962-67, quarterly for 1968, and monthly for 1969

Year	Quantity			Value			Average price		
	Large	Scrod	Total	Large	Scrod	Total	Large	Scrod	Average
	Million pounds 1/			Million dollars			Cents per pound		
1962	52.7	65.0	117.7	5.3	5.6	10.9	10.1	8.6	9.3
1963	56.7	52.0	108.7	6.4	5.3	11.7	11.2	10.2	10.8
1964	64.5	52.6	117.1	6.8	5.1	11.8	10.5	9.2	10.1
1965	50.9	66.2	117.1	6.9	6.8	13.7	13.5	10.3	11.7
1966	35.4	79.2	114.6	5.2	8.6	13.8	14.7	10.8	12.0
1967	29.3	55.9	85.2	4.3	6.7	11.1	14.7	12.1	13.0
1968									
1st quarter	7.1	7.6	14.8	1.28	1.24	2.52	19.0	17.1	17.9
2d quarter	10.7	10.1	20.8	1.23	1.14	2.37	12.6	11.3	11.7
3d quarter	9.4	6.4	15.8	1.31	.85	2.13	13.8	13.3	13.5
4th quarter	6.0	3.2	9.2	1.20	.63	1.78	21.2	20.5	21.0
Year	33.3	27.4	60.7	5.56	4.27	9.71	16.7	15.6	16.0
1969									
January	1.5	.9	2.4	0.36	.21	.57	24.0	23.3	23.8
February	1.4	1.1	2.5	0.34	.27	.61	24.3	24.5	24.4
March	2.5	1.9	4.3	0.46	.33	.79	18.4	17.4	18.4
1st quarter	5.3	3.8	9.2	1.16	.81	1.97	21.9	21.3	21.4
April	3.8	2.6	6.3	.53	.36	.89	14.3	13.8	14.1
May	2.8	1.3	4.1	.46	.22	.68	16.4	16.9	16.6
June	3.4	1.3	4.7	.45	.17	.62	13.2	13.1	13.2
2d quarter	10.0	5.1	15.1	1.44	.75	2.19	14.4	14.7	14.5
July	2.0	.6	2.7	.41	.13	.54	20.5	16.7	20.0
August	2.2	.6	2.8	.45	.13	.58	20.5	21.7	20.7
September	2.5	.6	3.1	.55	.13	.68	22.0	21.7	21.9
3d quarter	6.6	1.8	8.5	1.41	.39	1.80	21.4	21.7	21.2
October	2.2	.5	2.6	.53	.12	.65	24.1	24.0	25.0
November	1.3	.3	1.6	.34	.08	.42	26.2	26.7	26.3
December	1.2	.2	1.4	.37	.06	.43	30.8	30.0	30.7
4th quarter	4.7	1.0	5.6	1.24	.26	1.50	26.4	26.0	26.8
Year	26.7	11.7	38.4	5.22	2.20	7.42	19.6	18.8	19.3

1/ - Drawn weight.
May not add to total because of rounding.

Table 19. First-of-month cold storage holdings of haddock fillets, United States and Canada 1968-70

Month	United States			Canada[1]			Total		
	1968	1969	1970	1968	1969	1970	1968	1969	1970
	Million pounds								
January	6.9	4.8	7.1	2.2	1.1	1.0	9.1	5.9	8.1
February	5.4	3.3	5.5	1.8	1.0	.8	7.2	4.3	6.3
March	4.1	2.8		1.5	1.2		5.6	4.0	
April	3.0	1.9		2.2	2.3		5.2	4.2	
May	3.6	3.5		2.9	3.9		6.4	7.4	
June	3.8	3.5		3.3	3.0		7.1	6.4	
July	4.0	4.0		3.0	3.2		7.0	7.2	
August	5.3	4.5		2.7	2.3		8.0	6.8	
September	5.2	5.7		2.4	2.0		7.6	7.7	
October	6.3	5.9		2.2	1.9		8.5	7.8	
November	6.1	6.1		1.9	1.5		8.0	7.7	
December	5.0	5.9		1.5	1.0		6.4	6.9	

1/ - Industry Division, Dominion Bureau of Statistics, Ottawa.
e - Estimate.
p - Preliminary
Figures may not add to total because of rounding.

Table 20. Monthly exvessel, wholesale, and retail prices of haddock in the United States, 1968-70

	Exvessel price[1]			Wholesale price						Retail price[4]		
				Fresh fillets[2]			Frozen fillets[3]					
	1968	1969	1970	1968	1969	1970	1968	1969	1970	1968	1969	1970
	Cents per pound											
January	19.2	24.2	33.9	85.0	83.5	115.0	37.5	52.0	55.0	66.8	69.1	80.6
February	20.1	24.4	33.8	69.5	87.0	112.5	39.5	52.5	55.0	67.2	70.1	83.5
March	14.3	18.0	27.6	38.5	86.5	70.0	41.0	53.0	55.0	66.5	70.1	85.3
April	10.3	13.9		50.0	46.0		42.0	52.0		67.1	71.3	
May	12.3	16.6		44.0	59.0		38.5	51.0		67.5	72.6	
June	13.2	13.0		52.0	50.0		38.5	51.0		67.7	73.4	
July	12.3	20.3		54.0	78.5		38.5	51.0		67.6	74.6	
August	14.2	21.1		53.0	73.5		39.0	51.5		67.8	75.9	
September	14.2	22.6		52.0	73.0		41.5	51.5		67.5	76.8	
October	16.9	24.5		70.0	76.0		53.0	53.5		67.9	77.6	
November	18.6	26.0		80.5	118.5		52.5	53.5		68.1	78.3	
December	27.3	28.9		85.0	97.5		50.5	55.0		68.7	79.7	
Average[5]	14.7	21.1		61.1	77.4		42.7	52.3		67.5	74.1	

1/ - Weighted average for large and scrod, New England principal ports.
2/ - Skins on 20-lb. tins, Boston.
3/ - Canadian, skins on 1-lb. packages, f.o.b. Boston.
4/ - One-pound packages, Bureau of Labor Statistics 47-city U.S. average price.
5/ - Annual weighted average.

Table 21. First-of-month cold storage holdings of ocean perch fillets in the United States and Canada, 1968-70

Month	United States			Canada[1]			Total		
	1968	1969	1970	1968	1969	1970	1968	1969	1970
	Million pounds								
January	18.0	19.7	16.4	6.7	5.5	3.4	24.7	25.1	19.8
February	16.4	15.3	13.5	3.7	4.1		20.1	19.5	
March	12.4	12.3		2.5	3.1		14.8	15.4	
April	7.3	8.6		1.7	1.5		9.0	10.1	
May	5.5	6.1		1.4	.8		6.8	6.8	
June	3.5	4.8		2.3	.8		5.9	5.6	
July	3.6	4.9		3.3	1.8p		6.9	6.7	
August	6.6	6.6		6.1	4.3		12.7	10.9	
September	9.5	7.8		7.1	4.4		16.6	12.2	
October	12.4	11.7		7.0	5.3		19.4	17.0	
November	17.0	13.9		8.5	4.6		25.5	18.4	
December	18.4	15.5		8.0	3.9		26.4	19.4	

1/ - Industry Division, Dominion Bureau of Statistics, Ottawa.
p - Preliminary.
Figures may not add to total because of rounding.

Table 22. Monthly exvessel, wholesale, and retail prices of ocean perch, 1968-70

Month	Exvessel price[1]			Wholesale price[2] (fillets frozen)			Retail price[3] (fillets frozen)		
	1968	1969	1970	1968	1969	1970	1968	1969	1970
	Cents per pound								
January	3.6	3.8	5.0	27.5	28.5	35.5	54.4	54.6	59.4
February	3.6	3.8	4.6	26.5	28.5	35.5	54.6	53.8	61.3
March	3.7	3.8	4.6	26.5	27.5	35.5	53.7	53.8	61.6
April	3.9	3.9		26.5	29.0		53.6	54.2	
May	3.8	4.0		27.0	29.0		53.8	54.7	
June	4.0	4.3		27.0	29.0		53.8	55.3	
July	4.0	4.4		28.0	29.5		54.6	55.4	
August	4.0	4.4		27.5	30.0		54.3	56.2	
September	4.0	4.4		27.3	30.0		50.8	57.0	
October	3.9	4.4		27.0	32.0		54.8	57.5	
November	3.9	4.6		27.0	34.0		54.5	57.8	
December	3.8	4.3		28.0	35.0		54.5	58.4	
Average	3.8	4.2		27.1	30.2		53.9	55.7	

1/ - Weighted average at principal New England ports.
2/ - Skins on, 1-lb. package, frozen, at Boston.
3/ - Bureau of Labor Statistics 46-city U.S. average price.

Table 23. Monthly exvessel and wholesale prices of pollock and exvessel prices of cusk in the United States, 1968-70

Month	Pollock						Cusk		
	Exvessel price[1]			Wholesale price[2]			Exvessel price[1]		
	1968	1969	1970	1968	1969	1970	1968	1969	1970
	Cents per pound								
January	8.8	7.6	6.9	24.5	-	28.3	14.1	10.0	11.2
February	10.2	9.8	11.0	25.0	27.0	28.0	10.1	10.3	12.0
March	13.4	7.9	18.6	25.0	27.0	28.6	11.9	9.3	11.2
April	12.1	9.0		26.5	27.0	29.9	6.2	5.6	
May	9.7	12.7		26.5	28.0		5.8	6.2	
June	8.6	8.2		27.5	27.3		5.5	5.6	
July	8.0	7.4		27.5	26.8		6.0	8.9	
August	7.2	8.6		27.5	27.5		8.1	5.9	
September	6.8	7.8		27.0	28.0		6.4	7.0	
October	7.8	8.5		27.5	28.0		8.8	8.3	
November	7.0	8.4		27.5	28.0		9.4	11.0	
December	7.6	5.7		27.0	28.0		11.8	9.0	
Average	8.9	8.5		26.6	27.5		8.7	8.3	

1/ - Boston.
2/ - Fillets, Canadian 5-lb. package, New York City Fulton Market.

FISH BLOCKS

REVIEW

Supply

Supplies of fish blocks increased moderately in 1969. Total supplies were 313 million pounds--up 16 million pounds from the previous year. Supplies of fish blocks have nearly doubled since 1962 (table 24).

Holdings and U.S. Production

Holdings of fish blocks at the beginning of 1969 were 44.4 million pounds--the highest carryover on record and 12 million pounds more than in the previous year (tables 24 & 28). The net result of all in-and-out movements during the year was a slight decline in block inventories to 43.0 million pounds on January 1, 1970.

U.S. production of blocks was only 2.2 million pounds in 1969, down from 3.6 million pounds in 1968 and the peak of 6.2 million pounds in 1967 (table 24). The long-run average has been 1 to 2 million pounds per year.

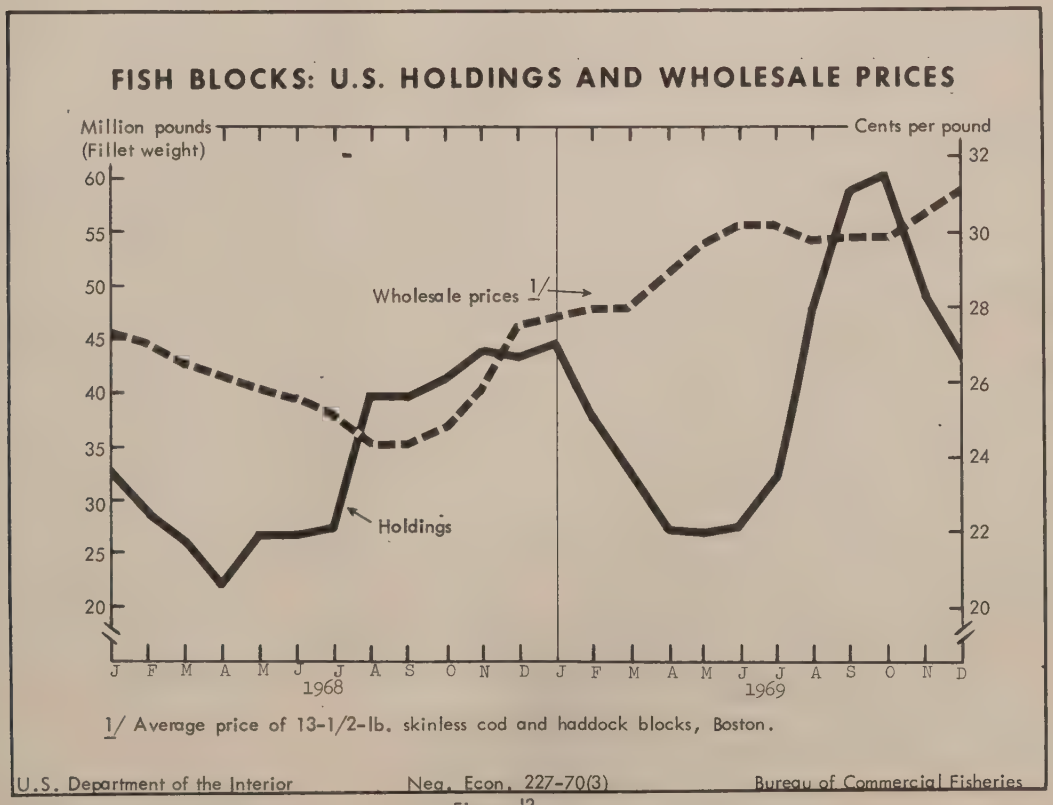


Figure 12

Table 24. Sources and disposition of frozen fish blocks in the United States, 1962-69

Year	Sources				Disposition	
	Beginning stocks	U.S. freezings	Imports	Total	Ending stocks	Disappearance
	Million pounds					
1962	17.7	1.6	143.5	162.8	24.3	138.5
1963	24.3	2.0	153.3	179.6	25.8	153.8
1964	25.8	2.0	166.2	194.0	20.0	174.0
1965	20.0	2.9	214.8	237.7	37.4	200.3
1966	37.4	6.0	206.5	249.9	35.2	214.7
1967	35.2	6.2	189.5	230.9	32.3	198.6
1968						
1st quarter	32.3	.8	57.3	90.4	22.0	68.4
2d quarter	22.0	1.0	64.4	87.3	27.5	59.9
3d quarter	27.5	1.3	76.6	105.4	41.3	64.0
4th quarter	41.3	.6	62.8	104.7	44.4	60.6
Year	32.3	3.6	261.1	297.1	44.4	253.0
1969						
January	44.4	.2	18.0	62.7	37.3	25.3
February	37.3	*	14.6	51.9	32.8	19.2
March	32.8	.1	22.5	55.3	27.2	28.1
1st quarter	44.4	.4	55.1	99.9	27.2	72.7
April	27.2	.1	15.3	42.7	26.9	15.8
May	26.9	.2	26.5	53.6	27.6	26.0
June	27.6	.2	17.7	45.5	32.3	13.2
2d quarter	27.2	.5	59.5	87.2	32.3	55.0
July	32.3	.2	33.1	65.6	48.1	17.5
August	48.1	.2	33.9	82.3	58.8	23.4
September	58.8	.3	24.9	84.1	60.3	23.8
3d quarter	32.3	.7	91.9	124.9	60.3	64.7
October	60.3	.4	24.9	85.5	50.1	35.5
November	48.8	.1	15.0	63.9	43.8	20.1
December	43.9	*	20.2	64.1	43.0	21.1
4th quarter	60.3	.6	60.2	121.1	43.0	78.1
Year	44.4	2.2	266.7	313.3	43.0	270.3

* - Less than 50,000 pounds.
p - Preliminary
Figures may not add to total because of rounding.

Imports Up 2 Percent from 1968

Imports of fish blocks increased only 6 million pounds in 1969, from 261 million pounds in 1968 to 267 million pounds last year (tables 24 & 26). The increase in imports last year was much below the 1964-68 average increase of 23.5 million pounds per year. The import duty on blocks dropped from 0.6 cent per pound in 1968 to 0.4 cent in 1970.

Canada, the main source of fish blocks, shipped 88.7 million pounds to the United States last year (table 25). Although Canada provided one-third of all imports, receipts from there were 17.5 million pounds less than in the previous year when Canada had 41 percent of the market. To restore prices to 24 U.S. cents or more per pound, the Canadian Government began a price stabilization program for blocks by purchasing cod blocks when prices were low. Prices of cod blocks to primary wholesalers in the United States rose from 21.3 cents per pound in the first quarter of 1969 to 24.3 cents in November and 25.5 cents in December. The program succeeded in raising prices.

Imports of blocks from all other countries, except Norway, dropped in 1969. Norway's exports of blocks to the United States increased 38.4 million pounds to 73 million pounds (table 25). Norway had 27 percent of total United States imports in 1969 compared with 13 percent in 1968.

About 72 percent of all block imports were cod compared with 68 percent the year before (table 26). Haddock blocks dropped from 9 percent of the total in 1968 to 7 percent in 1969.

Demand

About 270 million pounds of fish blocks were used in the manufacturing of fish sticks and portions (table 24). Disappearance was 7 percent above 1968.

The market for cod blocks strengthened gradually during all of 1969, whereas in the previous year prices weakened continually. In 1968, prices of cod blocks dropped from 26.6 cents in January to 21.4 cents in December (table 29). In 1969, prices of cod blocks rose from 21.2 cents in January to 25.5 cents in December. The average annual price for 1969 was 23.4 cents per pound or nearly identical to the 23.3-cent average the previous year. Average annual prices for cod blocks peaked at 29.1 cents in 1965 then dropped to 27.3 cents in 1966. Since 1967, the average annual price for cod blocks has been 23.2 to 23.4 cents--extremely steady in light of the growth in consumption for fish sticks and portions.

Prices of fish blocks are expected to average higher in 1970 than in 1969. Prices of cod blocks were 2.0 to 2.5 cents per pound above last year in the early months of 1970. Prices of ocean perch blocks advanced about 1 cent between the last quarter of 1969 and the first quarter of 1970. Prices for haddock and pollock blocks held steady.

Table 25. Cod blocks: Canadian freezings and United States imports, by country of origin, monthly 1968-69

Year	Canadian freezings	U. S. imports of cod blocks by county of origin				
		Canada	Norway	Iceland	Others	Total
	Million pounds					
1968						
January	2.4	2.1	1.5	4.1	5.6	13.3
February	4.9	5.0	1.1	2.0	3.3	11.3
March	4.1	3.7	.9	1.8	6.5	12.9
April	5.7	3.8	4.0	2.3	3.8	13.9
May	5.7	4.3	3.2	6.0	5.0	18.5
June	12.4	5.2	4.1	2.0	2.3	13.6
July	16.3	10.3	1.0	2.9	7.2	21.4
August	8.5	9.0	.9	2.2	3.0	15.1
September	6.1	4.8	2.1	2.2	4.8	13.9
October	4.7	8.2	1.1	.5	2.9	12.7
November	2.0	3.7	2.8	6.4	.4	13.3
December	1.6	4.8	2.2	6.8	2.5	16.3
Total	74.4	64.9	24.9	39.2	47.3	176.2
1969						
January	3.4	5.1	5.2	2.1	1.1	13.5
February	4.2	3.7	3.2	1.1	2.2	10.7
March	2.8	3.4	6.3	2.6	4.5	16.8
April	4.3	2.8	4.0	1.1	3.7	11.6
May	6.5	3.7	8.1	3.4	4.9	20.1
June	14.9	4.5	5.5	2.3	.6	12.9
July	17.1	9.1	3.4	6.9	4.7	24.0
August	6.3	6.4	8.7	4.9	5.3	25.3
September	4.0	3.0	3.6	6.4	3.1	16.1
October	1.9	4.4	5.1	3.0	3.0	15.5
November	1.2	3.6	2.7	3.9	1.2	11.4
December	1.3p	7.3	4.0	.7	2.7	14.7
Total	67.9	57.0	59.8	38.4	37.5	192.6

Sources:
1. Dominion Bureau of Statistics, Canada.
2. U.S. Dept. of Commerce.

Table 26. Imports of fish blocks and slabs by species 1968-69

Country of Origin	Cod		Haddock		Other		Total	
	1968	1969	1968	1969	1968	1969	1968	1969
	Million pounds							
Canada	65.8	57.2	5.0	1.5	35.4	30.0	106.2	88.7
Iceland	39.3	38.4	10.3	6.3	8.6	9.4	58.2	54.1
Norway	24.7	59.9	5.4	6.7	4.5	6.4	34.6	73.0
Denmark	18.6	11.6	1.9	3.7	1.4	2.5	21.9	17.8
Poland	15.5	14.7	-	-	-	.1	15.5	14.8
Other	12.5	10.9	.9	1.5	11.3	6.0	24.7	18.4
Total	176.4	192.6	23.5	19.6	61.2	54.4	261.1	266.7

Figures may not add to total because of rounding.

FISH STICKS AND PORTIONS

Review--1969

Supply

Supplies of fish sticks and portions set a new record high of 355.4 million pounds in 1969--23 percent above the previous year (table 27). Supplies increased 66 million pounds compared with the 1964-68 average increase of 20.7 million pounds per year. Higher inventories and higher production both contributed to the increase in supplies. Cold storage holdings at the start of 1969 were record high and 10 million pounds more than on hand the previous year. The combined production of sticks and portions increased 20 percent over 1968.

Production of Fish Sticks Up 24 Percent

Production of fish sticks jumped sharply in 1969 to 113.3 million pounds from 91.7 million pounds produced in 1968 (table 27). Last year was the second consecutive year of large increases in fish stick production. During 1955-67 fish stick production ranged between 53 and 82 million pounds, with considerable year-to-year fluctuations. Production jumped 18 million pounds in 1968 and another 22 million pounds in 1969.

Production of Fish Portions Up 18 Percent

Production of fish portions was 216.5 million pounds in 1969--up 34 million pounds from 1968 (table 27). Unlike fish sticks, production of fish portions has increased steadily every year since production data first became available in 1958. The production increase last year was more than double the 1958-68 average increase of 16 million pounds.

Demand

Consumption Up Sharply

The apparent consumption of fish sticks and portions in 1969 was 330 million pounds--a record high (table 27). Sales last year were up 65 million pounds, or 24 percent above the previous year. The average annual increase in sales during 1964-68 was 18.6 million pounds.

The growth in sales of fish sticks and portions has been much faster than the increase in population so that per capita consumption in 1969 was 1.63 pounds compared with 1.33 pounds the year before. Consumption has doubled since 1962 when it was 0.81 pound per capita.

Demand for fish sticks and portions was extremely high in 1969. Lower prices accounted for part of the increase in consumption. Fish sticks and portions were two of the relatively few food items that declined in price in 1969. Consumers were probably more aware of food prices last year than ever before. Apparently they found fish sticks and portions to be a good buy compared with other fishery and red meat products. In addition, the franchising of food service outlets in the past couple of years has

Table 27. Sources and disposition of fish sticks and portions in the United States, 1962-69

Year	Sources					Disposition		
	Beginning stocks	Production			Imports	Total	Ending stock	Apparent consumption	
		Sticks	Portions	Total				Total	Per capita
	Million pounds								Pounds
1962	10.5	72.2	78.7	150.9	0.3	161.7	11.6	150.2	0.807
1963	11.6	79.3	94.6	173.9	.4	185.9	13.6	172.3	.912
1964	13.6	73.6	106.3	179.9	.2	193.7	8.1	185.6	.969
1965	8.1	82.5	140.5	222.9	.3	231.3	14.2	217.1	1.120
1966	14.2	81.4	147.6	229.0	.4	243.6	19.5	224.1	1.144
1967	19.5	73.9	158.3	232.3	.4	252.2	14.0	238.2	1.204
1968									
1st quarter	14.0	24.2	44.8	69.0	.2	83.2	12.0	71.2	.358r
2d quarter	12.0	22.0	45.2	67.2	.2	79.4	18.4	61.0	.306r
3d quarter	18.4	21.1	44.8	65.9	.2	83.7	20.6	63.9	.319r
4th quarter	20.6	24.3	48.0	72.3	.3	93.2	24.0	69.2	.345r
Year	14.0	91.7	182.8	274.5	.9	289.4	24.0	265.4	1.328r
1969									
January	24.0	9.6	18.0	27.7	.1	52.1	19.2		
February	19.2	9.8	17.1	26.9	.2	46.9	19.2		
March	19.2	10.9	18.7	29.6	.1	49.0	18.0		
1st quarter	24.0	30.4	53.8	84.2	.4	108.6	18.0	90.6	.450r
April	18.0	10.0	18.3	28.2	.1	46.3	16.0		
May	16.0	8.8	17.2	26.0	.1	42.1	18.7		
June	18.7	8.1	15.2	23.3	.1	42.1	20.0		
2d quarter	18.0	26.8	50.6	77.5	.4	95.9	20.0	75.9	.376r
July	20.0	6.8	12.3	19.1	.1	38.0	16.7		
August	18.7	7.8	17.1	24.9	.1	43.2	17.1		
September	17.1	9.6	20.1	29.7	.2	45.7	17.1		
3d quarter	20.0	24.1	49.5	73.7	.4	94.1	17.1	77.0	.381r
October	17.1	11.4	23.1	34.6	.1	51.8	18.2		
November	18.2	9.8	19.3	29.1	.2	47.5	22.0		
December	22.0p	10.8	20.0	30.8	.1	52.9	25.4p		
4th quarter	17.1	32.0	62.5	94.5	.4	112.0	25.4p	86.6p	.427p
Year	24.0	113.3	216.5	329.8	1.6	355.4	25.4p	330.0p	1.634p

p - Preliminary.
r - Revised.

increased markedly. This trend in the food service industry has done much to increase consumption of fish sticks and portions, particularly fish portions.

Prices for Cod Fish Sticks Dropped Slightly While Prices for Haddock Sticks Rose a Little

Wholesale prices for a dozen 8-oz. packages of cod sticks varied between $3.18 and $3.30 in 1969 (table 29). Wholesale prices for haddock sticks varied between $3.53 and $3.70, with the average price in 1969 at $3.59. For the year, wholesale prices of cod sticks averaged 4 cents less than in 1968, while haddock sticks increased by 4 cents. Consequently, the margin between cod and haddock sticks increased from 26 cents to 34 cents per dozen packages.

Similar Price Situation for Cod and Haddock Portions

The annual average wholesale price for cod portions was 37.0 cents per pound in 1969 compared with 37.9 cents the year before. Wholesale prices increased more for haddock portions than for haddock sticks. The average annual wholesale price for haddock portions was 46.3 cents per pound in 1969. Prices rose 11 percent above the 1968 average of 41.7 cents. The margin between cod and haddock portions increased from 3.8 cents per pound in 1968 to 9.3 cents in 1969.

OUTLOOK - 1970

Demand

Consumption

The increase of 65 million pounds in sales of fish sticks and portions in 1969 was four times greater than the average annual increase of the last 8 years. Sales in 1970 are not expected to increase as much as last year. An increase of 34 to 36 million pounds for the entire year is projected. Such an increase, while not equal to last year would still be considerably above the 18.6-million-pound increase during 1964-68.

Sales of fish sticks and portions in the first quarter this year were about 100 million pounds, while the second quarter sales may drop to about 80 million pounds. Lower sales in the second quarter are the normal seasonal movement. We estimate that total sales in the first half of 1970 will be about 176 million pounds--a 10-million-pound increase over the first half of last year.

Supply

Production of fish sticks and portions jumped 55 million pounds last year. A more moderate increase of 34 to 36 million pounds is expected this year. The expected increase would still be well above

the 1964-68 average gain of 20 million pounds per year.

Imports of uncooked fish sticks and portions have historically been a fraction of domestic production. The rates of import duties on these products have been dropping 2 percentage points each year from a 20-percent rate in 1967 to a 10-percent rate in 1972. The duty rate this year is 14 percent. These reduced duty rates likely will stimulate some increase in shipments of fish sticks and portions to the United States this year. At present, however, imports are only a fraction of domestic production.

Prices

Wholesale prices of cod sticks and portions may not decline this year as they did last year. It is likely they will stay near current levels in the fist half of this year. First quarter prices averaged about the same as first quarter a year ago. Wholesale prices of cod portions averaged a little higher in the first quarter than a year ago, and this increase likely will continue in the second quarter.

Prices of haddock sticks and portions could increase more than the relatively mild increase last year. First quarter prices of both sticks and portions were higher than a year ago. Prices for haddock products may strengthen more in the last half of the year than in the first half as supplies are expected to be even lower in the second half than in the first half of 1970.

Table 28. First-of-month cold storage holdings of frozen fish blocks in the United States and Canada, and sticks and portions in the United States, 1968-70

Month	Blocks									Sticks & portions (U.S.)		
	United States			Canada 1/			Total					
	1968	1969	1970	1968	1969	1970	1968	1969	1970	1968	1969	1970
	Million pounds											
January	32.3	44.4	43.0	12.1	8.9	10.7p	44.4	53.3	53.7	14.0	24.0	25.4
February	28.8	37.3	37.5p	8.6	7.1		37.4	44.5		12.3	19.2	24.2p
March	25.9	32.8		8.1	6.1		34.0	38.9		12.3	19.2	
April	22.0	27.2		6.3	5.5		28.3	33.0		12.0	18.0	
May	26.8	26.9		7.6	6.5		34.4	33.9		13.7	16.0	
June	27.0	27.6		11.6	8.9		37.6	36.4		15.7	18.7	
July	27.5	32.2		19.9	17.4		47.4	49.6		18.4	20.0	
August	39.9	48.1		23.5	24.1		63.5	72.2		20.5	18.7	
September	40.1	58.8		23.3	20.8		63.4	79.6		20.6	17.1	
October	41.3	60.3		21.0	25.0		62.3	85.3		20.6	17.1	
November	44.1	48.8		15.2	22.3		60.3	72.4		21.0	18.2	
December	43.4	43.9		11.2	15.9		54.7	59.8		21.1	22.0	

1/ - Industry Division, Dominion Bureau of Statistics, Ottawa.
p - Preliminary.
Figures may not add to total because of rounding.

Table 29. Monthly prices to primary wholesalers: cod and haddock blocks, sticks and portions, 1968-70 1/

Species/ year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year average
						Cents per pound							
Cod blocks													
1968	26.6	26.2	25.5	24.8	24.2	23.5	22.5	21.3	21.3	21.3	21.4	21.4	23.3
1969	21.2	21.2	21.5	23.3	23.8	24.3	24.3	23.5	23.8	23.9	24.3	25.5	23.4
1970	26.5	27.0	27.0	28.0									
Haddock blocks													
1968	27.9	28.0	27.8	27.5	27.2	27.5	27.9	27.5	27.5	28.5	30.4	33.5	28.4
1969	34.4	35.1	34.9	35.1	35.8	36.0	36.0	36.0	36.0	35.9	36.4	36.5	35.7
1970	36.5	36.5	36.5	36.5									
						Dollars per dozen packages							
Cod sticks, breaded cooked, in 8-oz. pkgs.													
1968	3.34	3.38	3.38	3.20	3.20	3.20	3.29	3.32	3.30	3.30	3.30	3.30	3.29
1969	3.30	3.27	3.18	3.18	3.18	3.18	3.28	3.28	3.28	3.30	3.30	3.30	3.25
1970	3.05	3.30	3.30	3.45									
Haddock sticks, breaded cooked, in 8-oz. pkgs.													
1968	3.68	3.60	3.60	3.55	3.53	3.53	3.52	3.51	3.53	3.53	3.53	3.53	3.55
1969	3.53	3.54	3.56	3.58	3.58	3.58	3.58	3.58	3.59	3.70	3.70	3.59	3.59
1970	3.58	3.58	3.58	3.50									
						Cents per pound							
Cod portions, raw breaded, 2-4 oz. portions													
1968	38.9	39.5	38.5	38.5	37.7	37.5	38.3	37.8	37.0	37.0	37.0	37.0	37.9
1969	37.0	36.6	36.3	37.6	36.8	36.8	37.0	37.5	37.0	37.5	37.5	36.5	37.0
1970	37.5	37.5	38.0	38.0									
Haddock portions, raw breaded, 2-4 oz. portions													
1968	43.2	42.0	42.5	40.3	41.6	42.0	41.6	41.5	41.5	41.7	41.5	41.5	41.7
1969	41.5	43.5	45.8	45.1	45.6	46.4	47.5	47.5	47.5	48.0	48.3	49.0	46.3
1970	48.6	48.5	48.5	48.7									

1/ - F.o.b. Gloucester.

Table 30. Sources and disposition of Pacific halibut in the United States, 1962-70

Year	Sources				Disposition		
	Beginning stocks	Landings	Imports	Total	Ending stocks	Apparent consumption	
						Total	Per capita
	Million pounds 1/						Pounds
1962	13.8	40.4	34.9	89.0	22.6	66.5	0.357
1963	22.6	34.3	29.4	86.3	25.4	60.9	.323
1964	25.4	26.3	30.3	82.0	15.8	66.3	.346
1965	15.8	30.4	30.0	76.2	17.4	58.8	.304
1966	17.4	30.4	27.4	75.2	20.7	54.5	.278
1967	20.7	30.1	26.1	76.9	19.3	57.6	.292
1968							
1st quarter	19.3	-	5.3	24.5	9.5	15.1	.076
2d quarter	9.5	9.5	8.4	27.3	14.5	12.8	.064
3d quarter	14.5	8.4	10.3	33.3	17.6	15.7	.079
4th quarter	17.6	1.5	9.0	28.1	13.7	14.3	.071
Year	19.3	19.4	33.0	71.8	13.7	58.0	.290
1969							
January	13.7	-	1.5	15.2	11.4	3.8	
February	11.4	-	1.7	13.1	7.3	5.8	
March	7.3	-	3.3	10.6	5.1	5.5	
1st quarter	13.7	-	6.5	20.2	5.1	15.1p	.075p
April	5.1	.3	1.7	7.1	3.3	3.8	
May	3.3	4.8	1.5	9.6	5.9	3.7	
June	5.9	4.6	2.8	13.3	7.9	5.4	
2d quarter	5.1	9.7	6.0	20.8	7.9	12.9p	.064p
July	7.9	4.7	4.0	16.6	11.4	5.2	
August	11.4	4.7	3.4	19.5	15.3	4.2	
September	15.3	4.3	5.0	24.6	18.8	5.8	
3d quarter	7.9	13.7	12.4	34.0	18.8	15.2p	.075p
October	18.8	.9	3.4	23.1	18.9	4.2	
November	18.9	.9	2.0	21.8	17.6	4.2	
December	17.6	-	1.7p	19.3	14.9p	4.4	
4th quarter	18.8	1.8	7.1p	27.7	14.9p	12.8p	.063p
Year	13.7	25.2	32.0	70.9	14.9	56.0p	.277p
1970							
January	14.9	-	1.3	16.2	12.4p	3.8p	
February	12.4p	-	1.6	14.0	9.5p	4.5p	
March	9.5p	-					

1/ - The sum of dressed, fillets, and steaks, after conversion to dressed weight.
p - Preliminary.
Figures may not add to total because of rounding.

HALIBUT

1969 Review

Supply

Landings Good

Halibut fishing was good in 1969 and prices were record high. As prices increased in the first three quarters of last year, more vessels were attracted to the fishery. About 340 boats, equally divided between Canada and the United States were engaged in fishing. For the first time since 1966, the North Pacific halibut quota was caught before the end of the season.

The total United States and Canadian landings in 1969 were 58.4 million pounds even though the quota was 55.5 million pounds. The higher figure included incidental catch and landings from unrestricted areas. Landings were up 9.6 million pounds, or 19.6 percent from the near-record low 1968 catch of 48.8 million pounds. The U.S. catch was 25.1 million pounds, about 43 percent of the total and almost 6 million pounds more than 1968 U.S. landings (table 31 and figure 13).

Exvessel Prices Record High

The soaring exvessel prices of halibut brought the Seattle 1969 season average up to 42.2 cents a pound (weighted average for medium size), 14 cents, or 50 percent, higher than the 1968 average price of 28.3 cents. Ketchikan exvessel prices at 37.2 cents averaged 83 percent higher than 1968, and Prince Rupert prices at 42.3 cents were 82 percent higher (table 32). Halibut fishermen received about $23 million of which U.S. fishermen got $11 million of the total, almost two and a half times their earnings in 1968.

In 1967 and 1968, halibut prices at all levels fell drastically. This decline in prices discouraged fishing and resulted in fewer fishing trips and decreased landings.

Imports Down Slightly

In 1969, imports of halibut in fillets, steaks and dressed forms totaled 32 million pounds--1 million pounds less than in 1968. Imports from Canada dropped 1.6 million pounds to 22.8 million pounds. Imports of halibut from Japan increased to 4.3 million pounds last year. Imports from Norway also increased.

Japanese halibut fishing is now confined to Asiatic waters west of the Bering Sea. The large Japanese and Russian factory ships with their fleets of trawlers keep coming closer to the regulatory areas. South Korea is also fishing near the halibut grounds. The U.S. is concerned with these developments and is closely monitoring the situation.

Holdings--Lower Than Normal

Beginning U.S. holdings of halibut in 1969 were 13.7 million pounds, about 5.6 million pounds lower than the year before. Beginning Canadian holdings dropped almost 3 million pounds from 9.7 in 1968 to 6.9 million pounds in 1969 (table 33 and figure 14).

At the beginning of this year, United States holdings were 14.5 million pounds and Canadian holdings 7.6 million. Both increased about 0.8 million pounds from a year ago. Compared with previous years the current level of holdings in both countries are considered lower than normal.

Table 31. Landings of halibut on the Pacific Coast by United States and Canadian vessels, 1967-69

Coastal Section	1967			1968			1969p		
	U.S.	Canada	Total	U.S.	Canada	Total	U.S.	Canada	Total
	Million pounds[1]								
Oregon	0.1	-	0.1	0.1	-	0.1	0.1	-	0.1
Washington	9.4	1.0	10.4	9.1	3.6	12.7	7.7	2.2	9.9
South British Columbia	-	9.0	9.0	-	8.8r	8.8r	-	7.2	7.2
North British Columbia	.3	10.0	10.3	.1	13.6r	13.7r	.5	19.3	19.8
Southeast Alaska	15.7	1.6	17.3	8.2	.6	8.8	12.2	.9	13.1
Central Alaska	4.4	3.9	8.3	1.8	3.0	4.8	4.6	3.7	8.3
Total[2]	29.9	25.6	55.5	19.4r	29.5r	48.8r	25.1	33.3	58.4

1/ - Dressed weight.
2/ - Figures may not add to total because of rounding.
p - Preliminary.
r - Revised.

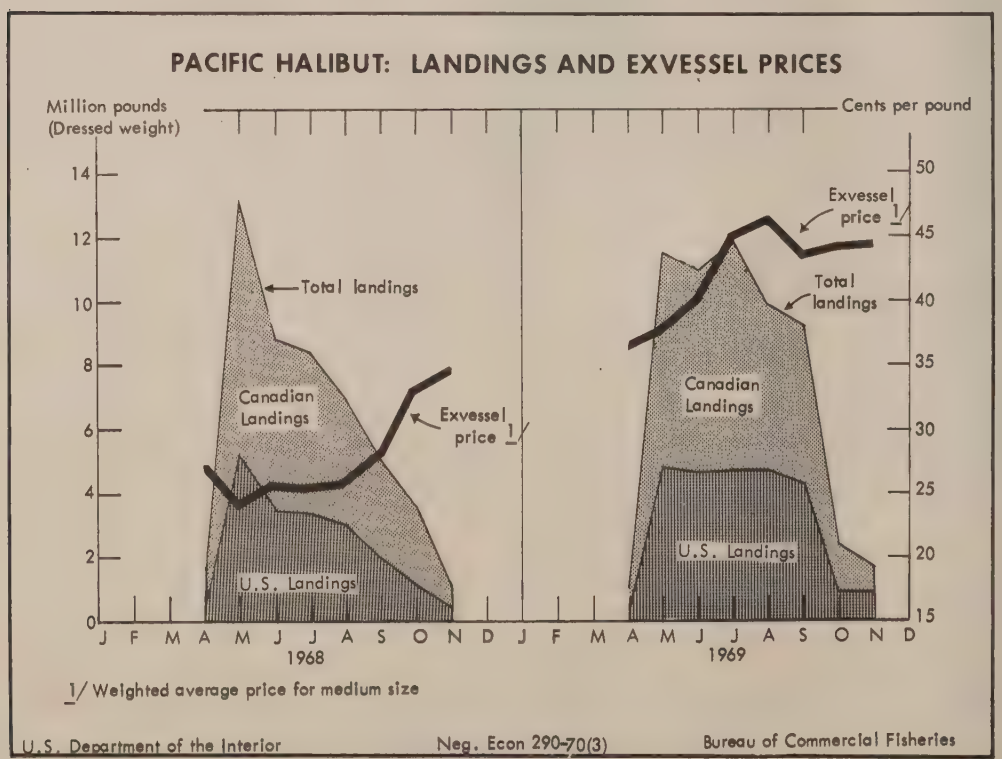

PACIFIC HALIBUT: LANDINGS AND EXVESSEL PRICES
Million pounds (Dressed weight)
Cents per pound
Total landings
Canadian Landings
Exvessel price 1/
U.S. Landings
Exvessel price 1/
Total landings
Canadian Landings
U.S. Landings
J F M A M J J A S O N D J F M A M J J A S O N D
1968
1969
1/ Weighted average price for medium size
U.S. Department of the Interior
Neg. Econ 290-70(3)
Bureau of Commercial Fisheries

Figure 13

Table 32. Monthly exvessel, wholesale, and retail prices of Pacific halibut, 1968-70

Month	Exvessel price[1]									Wholesale price[2]			Retail price[3]		
	Seattle			Ketchikan			Prince Rupert								
	1968	1969	1970	1968	1969	1970	1968	1969	1970	1968	1969	1970	1968	1969	1970
	Cents per pound														
January	-	-	-	-	-	-	-	-	-	39.0	41.3	57.5	88.1	86.0	106.0
February	-	-	-	-	-	-	-	-	-	34.5	41.3	57.5	87.5	91.5	102.5
March	-	-	-	-	-	-	-	-	-	34.5	43.0	56.5	91.5	90.3	101.9
April	27.2	36.5		-			22.6			34.5	47.0		93.2	86.6	
May	24.8	37.7		20.0	29.3		24.4	36.7		34.3	47.0		92.7	91.8	
June	25.1	40.2		19.8	34.5		22.7	40.9		37.2	58.0		92.2	98.5	
July	25.7	45.1		20.5	37.5		22.9	43.3		39.4	62.0		89.5	103.5	
August	27.4	46.2		21.0	46.0		-	45.3		41.6	62.0		89.8	106.5	
September	29.0	43.6		-	38.5		-	44.1		40.6	66.0		88.0	101.0	
October	25.8	44.2		-	-		-	43.7		45.2	60.0		89.1	100.1	
November	33.7	44.3		-	-		-	-		38.5	63.0		93.0	123.8	
December	-	-		-	-		-	-		39.0	58.0		89.0	104.0	
Average	28.3	42.2		20.3	37.2		23.2	42.3		38.2	54.1		90.3	98.6	

1/ - Weighted average price for medium size.
2/ - Dressed form, frozen, at New York, N.Y.
3/ - Steak form, fresh at New York, N.Y.

Demand

The halibut market in the first half of 1969 was stronger than in the same period the year before and sales were slightly higher. Although sales in the third quarter increased from the second quarter, they lost some of the vigor shown in the same period of 1968. In the last quarter, demand weakened rapidly. Total sales for the year were 56.0 million pounds, dressed weight--down 2.0 million pounds, or 3 percent from the previous year.

Prices Increase at All Levels

Exvessel prices increased almost 50 percent at Seattle and 83 percent at Ketchikan from 1968 to 1969. Wholesale prices of frozen halibut at New York increased from an average of 38.2 cents a pound in 1968 to 54.1 cents in 1969--an increase of 42 percent (table 33). Only a comparatively moderate increase was reflected at the retail price level, from an average of 90.3 cents in 1968 to 98.6 cents a pound, up 9.2 percent.

As wholesale prices and exvessel prices increased from 40 to 80 percent, sales dropped only 3 percent. Factors contributing to the high 1969 prices include: (1) near record low storage holdings at the opening of the 1969 season (3.3 million pounds on May 1) and (2) a drop in imports in the early months. The result was a strong, stable market with a firm price structure.

Outlook for Halibut--May 1970 April 1971

The entire halibut marketing year is discussed in this outlook section. The Pacific halibut fishing season started in late April and will close by October or November. All of the fish landed during this period are marketed until the new fishing season starts next April or early May. During the production part of this year (May-October) prices have some affect on fishing effort and landings. All during the entire marketing year, prices have some affect on the rate of imports and consumption. In this way the industry accumulates stocks during the production season in the first part of the marketing year. From the end of the production season (October or November) until the beginning of the new production year (the following April or May) the industry rations the accumulated stocks so that consumption is fairly even and prices cover the cost of storage.

Supply--1970-71

Quota Restrictions

After intensified fishing of halibut by United States and Canadian fleets in 1969, the International Pacific Halibut Commission reduced the quota from 55.5 million pounds last year to 53 million pounds this year.

The quota restrictions will affect two major producing areas. The catch from Area 2 (South of Cape Spencer, Alaska) will be cut to 20 million pounds and that from Area 3A (from Cape Spencer to the Shumagin Islands) to 30 million pounds. A reduced quota has also been recommended for Area 3B (from the

Shumagin Islands to Atka Island in the Aleutian Chain)--3 million pounds this year, compared with 3.5 million pounds in 1969.

The Commission recommended again that the flats in the Southeast Bering Sea east of Area 4A, be declared a nursery ground and closed to all halibut fishing.

Landings on Pacific Coast Expected To Be Down

Except for 1967, when Canadian halibut landings were reduced by a strike of Canadian fishermen, United States vessels usually landed 40 to 43 percent of the combined landings of both countries. With no strikes or other incidents this year, and good prices, U.S. landings are expected to be about 22 to 23 million pounds, or about 2 1/2 million less than last year.

Canadian halibut landings on the Pacific Coast also probably will be down 2 1/2 million pounds in 1970; therefore we expect about 53 million pounds to be landed on the Pacific Coast by Canada and the United States--5 million less than last year. High prices are expected to stimulate fishing effort until the quota of 53 million pounds is reached.

Less Halibut May Be Available

About 56 million pounds of halibut are expected to be available in the United States during the May 1970 to April 1971 marketing year. This includes May 1, 1970 holdings of 4.8 million pounds, U.S. landings of 22 1/2 million, and imports of 29 million.

This is about 3 million pounds less than the 59.3 million pounds that were available during the May 1969 to April 1970 marketing year. On May 1, 1969, halibut inventories in Canada and the United States were unusually low, only 4.9 million pounds of which 3.3 million were United States inventories. This year total May 1 inventories in Canada and the United States were estimated at 7 million pounds--up 2 million pounds but not enough to offset the expected decline in landings. May 1 halibut holdings in the United States were 4.8 million pounds.

During the May 1969 to April 1970 marketing year imports were slightly over 30 million pounds. Imports are expected to be down slightly because Canadian halibut landings may be down. Good halibut prices will continue to attract imports from Japan, Norway and other countries.

Demand, Carryover, and Prices

Consumption Estimated at 54 Million Pounds

About 54 million pounds of halibut were consumed in the United States during the May 1969 to April 1970 marketing year. The wholesale price level averaged 58 1/2 cents a pound during this past marketing year. If this average price prevails during the May 1970 to April 1971 marketing year for Pacific halibut, we can expect another 54 million pounds of halibut to be used in the United States. Then May 1, 1971 holdings of halibut in the United States would be low at 2 million pounds--1 million pounds less than on May 1, 1969. Such low holdings would contribute to a bullish price situation.

If wholesale prices of halibut average higher or about 61 to 62 cents a pound during the current marketing year, it is likely that about 51 million pounds of halibut would be used in the current marketing year in the United States. This would leave about 5 million pounds on hand May 1, 1971--a normal situation.

Table 33. First-of-month cold storage holdings of halibut in the United States and Canada 1968-70[1/]

Month	United States			Canada[2/]			Total		
	1968	1969	1970	1968	1969	1970	1968	1969	1970
	Million pounds								
January	19.3	13.7	14.5	9.7	6.9	7.8	29.0	20.6	22.3
February	15.2	11.4	12.4	7.7	6.3	6.3	22.9	17.7	18.7
March	12.0	7.3	9.5p	6.5	4.3	5.1p	18.5	11.6	14.6p
April	9.5	5.1	6.2p	5.5	2.6	3.1p	15.0	7.7	9.3p
May	7.3	3.3	4.8p	4.7	1.6		12.0	4.9	
June	12.3	5.9		8.4	5.2		20.7	11.1	
July	14.5	7.9		9.9	8.1		24.5	16.0	
August	16.2	11.4		10.3	10.6		26.5	22.0	
September	17.9	15.3		10.5	11.2		28.4	26.5	
October	17.6	18.8		9.7	12.2		27.3	31.0	
November	16.4	18.9		9.4	10.9		25.8	29.8	
December	15.6	17.9		8.0	9.9		23.6	27.8	

1/ - Sum of dressed halibut, together with fillets and steaks converted to dressed weight.
2/ - Industry Division, Dominion Bureau of Statistics, Ottawa.
p - Preliminary.

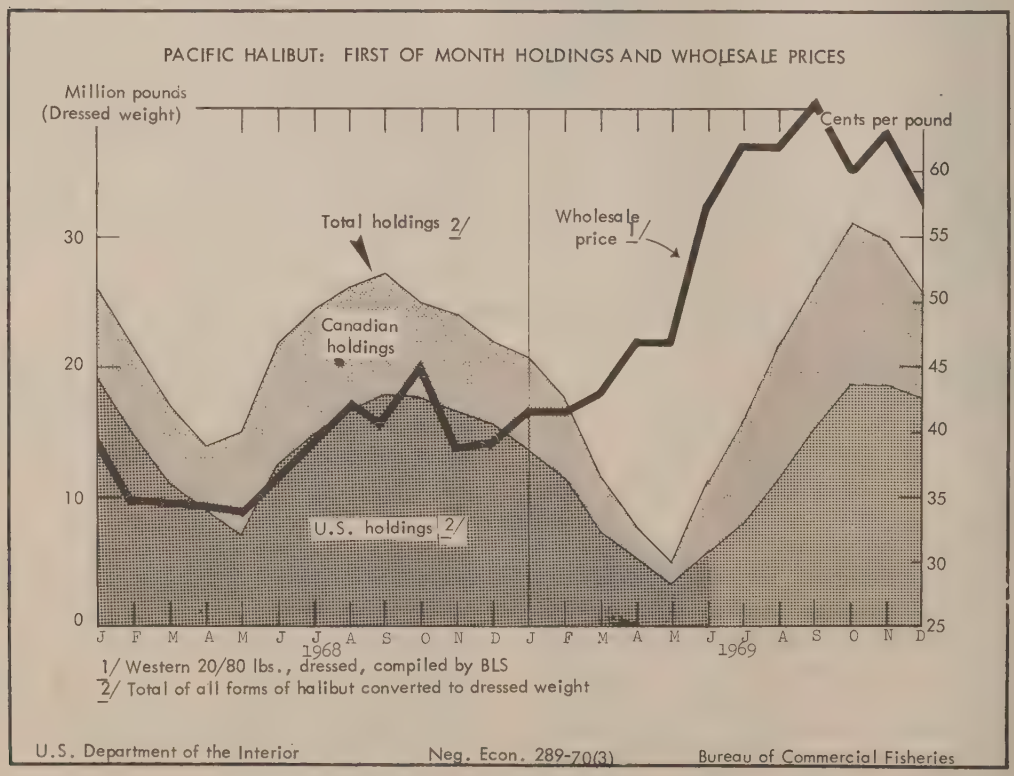


Figure 14

Table 34. Sources and disposition of canned salmon in the United States, 1968 and 1969

Year/Species	Source: Beginning stocks: Canners	Source: Beginning stocks: Distributors	Source: Production	Source: Imports	Source: Total	Disposition: Ending stocks: Canners	Disposition: Ending stocks: Distributors	Disposition: Exports	Disposition: Apparent consumption: Total	Disposition: Apparent consumption: Per capita
	Thousand standard cases									Pounds
1968-1st half										
King	63.1					35.6				
Red	876.0					443.9				
Coho	84.2					30.4				
Pink	435.9					104.1				
Chum	207.2					56.9				
Total	1,666.4	421.0		96.3	2,183.7	671.0 2/	316.0 2/	58.2	1,138.5 (54.65 mil.lbs.)	.274
1968-2d half										
King	35.6		62.5			56.7				
Red	443.9		745.2			638.3				
Coho	30.4		163.7			104.0				
Pink	104.1		1,800.6			1,035.1				
Chum	56.9		661.0			478.0				
Total	671.0	316.0	3,432.9 3/	7.0	4,426.9	2,312.1	434.0	61.1	1,619.7 4/ (77.74 mil.lbs.)	.388
1969-1st half										
King	56.7					20.0				
Red	638.3					141.8				
Coho	104.0					42.7				
Pink	1,035.1					429.0				
Chum	478.0					242.2				
Total	2,312.1	434.0		31.5	2,777.6	875.8 2/	433.0 2/	72.9	1,395.9 (67.00 mil.lbs.)	.331
1969-2d half										
King	20.0		62.4			41.3				
Red	141.8		912.4			458.6				
Coho	42.7		56.0			46.3				
Pink	429.0		1,318.7			984.2				
Chum	242.2		197.5			226.7				
Total	875.8	433.0	2,547.0 3/	18.8	3,874.6	1,757.1	400.0	250.8	1,466.7 (70.40 mil.lbs.)	.347

1/ - Plus for net import and minus for net export.
2/ - Does not include June pack.
3/ - Includes June pack.
4/ - Excludes 670 standard cases for nonfood uses.
Sources: 1. Division of Industry Statistics, National Canners' Association.
2. Department of Commerce.

SALMON

Review--1969

Supply

Salmon Landings Down 18 Percent

Salmon abundance in 1969 was the lowest since 1960, with the exception of the extremely poor year in 1967.

Landings of all salmon in 1969 were an estimated 246 million pounds, round weight--18 percent less than 1968. Landings of pink salmon and chum salmon were down sharply. Landings of red salmon increased slightly, but not enough to offset the lower catch of other salmon. These changes were part of the normal pattern for these species.

Salmon Pack Lower

U.S. canneries produced 2.55 million standard cases (table 34). Over 90 percent of the pack was produced in Alaska. The small runs of Alaskan pink salmon yielded 1.2 million standard cases out of the small U.S. pack of 1.32 million for this species. Alaska provided 790,000 standard cases out of the U.S. total red salmon pack of 912,000 cases. Chum salmon provided less than 200,000 standard cases, compared with 661,000 cases in 1968. The total pack of king salmon and coho salmon was 118,000 standard cases.

Holdings Up For 1969

Holdings of canned salmon by canners and distributors on January 1, 1969, were the equivalent of 2.75 million standard cases compared with 2.1 million a year earlier. Expecting small runs of pink salmon and chum salmon in 1969, canners and distributors conserved their holdings during the later part of 1968. At the beginning of 1969, their inventory of pink salmon and chum salmon was more than double that in 1968. Pink salmon was 45 percent of the total.

At the end of 1969, holdings were 2.16 million standard cases--almost 600,000 standard cases lower than the year before. Holdings of pink salmon were almost half the total.

Table 35. Source and disposition of fresh and frozen salmon 1968 and 1969

Year	Source				Disposition		
	Landings	Imports	Beginning stocks	Total	Exports	Ending stocks	Apparent consumption
	Million pounds, edible weight						
1968	35.6	7.6	7.7	50.9	12.6	13.0	25.3
1969	43.0	6.5	13.0	62.5	23.8	6.8	31.9

About 26.0 percent of salmon landings, or 43.0 million pounds (edible weight) went to the fresh and frozen market compared with 35.6 million pounds in 1968. The other 74.0 percent of salmon landings were canned.

Despite a drop in canned salmon production in 1969, salmon consumption was 137 million pounds in canned form, up 5.0 million pounds from 1968 (table 34). Consumption of fresh and frozen salmon was 32 million pounds, edible weight--an increase of 26 percent (table 35).

Sales Higher In the Second Half-Year

Shipments from canners and distributors were the equivalent of 1,437,000 standard cases in the first half of 1969, 73,000 standard cases of which were exported. Shipments of red salmon and pink salmon increased in the first quarter last year, but shipments of pink salmon slackened in the second quarter. In the second half of last year, stocks of pink salmon moved a little faster. This resulted in a total shipment of 1.7 million standard cases of all species of which 250,800 cases were exported.

Measured by product weight, domestic consumption of canned salmon was 67 million pounds in the first half of last year and 70 million pounds in the second half. The total was about 5.0 million pounds more than in 1968.

In anticipation of lower salmon catches in 1969 the industry carried over more canned salmon from the 1968 pack. Thus domestic and foreign sales of canned salmon increased in 1969 even though there was a drop in the pack of canned salmon.

Exports Up

Exports of canned salmon were 15.5 million pounds (edible weight) in 1969. Most of the gains were made in the second half-year. Exports in 1968 were only 5.7 million pounds. Exports of canned salmon were valued at $11.6 million last year against $4.6 million in 1968 (table 36).

The volume and value of fresh and frozen salmon exports last year were even more impressive. Exports of fresh and frozen salmon for 1969 were 30.6 million pounds in dressed weight, exceeding imports by over 22.1 million pounds. In 1968 net exports were 16.2 million pounds and imports were 9.8 million pounds. The value of fresh and frozen exports was $19 million, almost double that in 1968.

From 1963 to 1967, two-thirds to three-fourths of our exports of canned salmon went to the United Kingdom (table 40). In November 1967, the British devalued their currency by 14.3 percent. The result was an increase in American salmon prices of about 14 percent in the United Kingdom. The United Kingdom's share of United States exports of canned salmon dropped to 58 percent during the 1968-69 marketing year. While canned salmon exports have been up since August 1969, the proportion taken by the United Kingdom has not increased.

From 1963 to 1967, net exports accounted for about 9 to 16 percent of the total disappearance of U.S. canned salmon (table 41). From the beginning of 1968 to July 1969, net exports accounted for less than 5 percent.

Since August 1969, exports have accounted for a normal (12-14 percent) share of the total

disappearance. The only difference is that only about half has been going to the United Kingdom--somewhat below the normal 70 to 75 percent. The share going to other countries is above normal.

Wholesale Prices Mixed

The average wholesale prices of canned pink salmon and chum salmon decreased in 1969 from the year before, while those of red salmon and king salmon increased. The weighted average price of all four products dropped from $35.70 a standard case in 1968 to $34.80 last year, down 3 percent (table 39).

Retail Prices Firm for Frozen Salmon

Retail prices of frozen salmon in steak form as quoted in New York City increased from $1.70 a pound in December 1968 to $1.76 in January 1969 and $1.85 in June. Although the Department of Markets in New York City did not collect price information from July on, retail prices probably stayed around $1.80 to $1.85 a pound (table 39).

OUTLOOK

Supply--1970

Preliminary Forecast of Salmon Pack in Alaska

The Alaska Department of Fish and Game has predicted a 1970 canned salmon pack of 5.6 million standard cases, the highest since the 1941 pack of 6.9 million cases. Contributing to this exceptionally high estimate is an expected pack of 2.8 million cases of red salmon, highest since 1934. The 1970 forecast of the pink salmon pack is 2.3 million cases which will be only slightly lower than the 1949 record pack of 2.68 million cases. Because of the expected heavy pack this year canners' and distriburors' inventories on July 1, 1970, may be the lowest for many years, probably less than 400,000 cases.

Record Runs of Red and Pink Salmon Expected

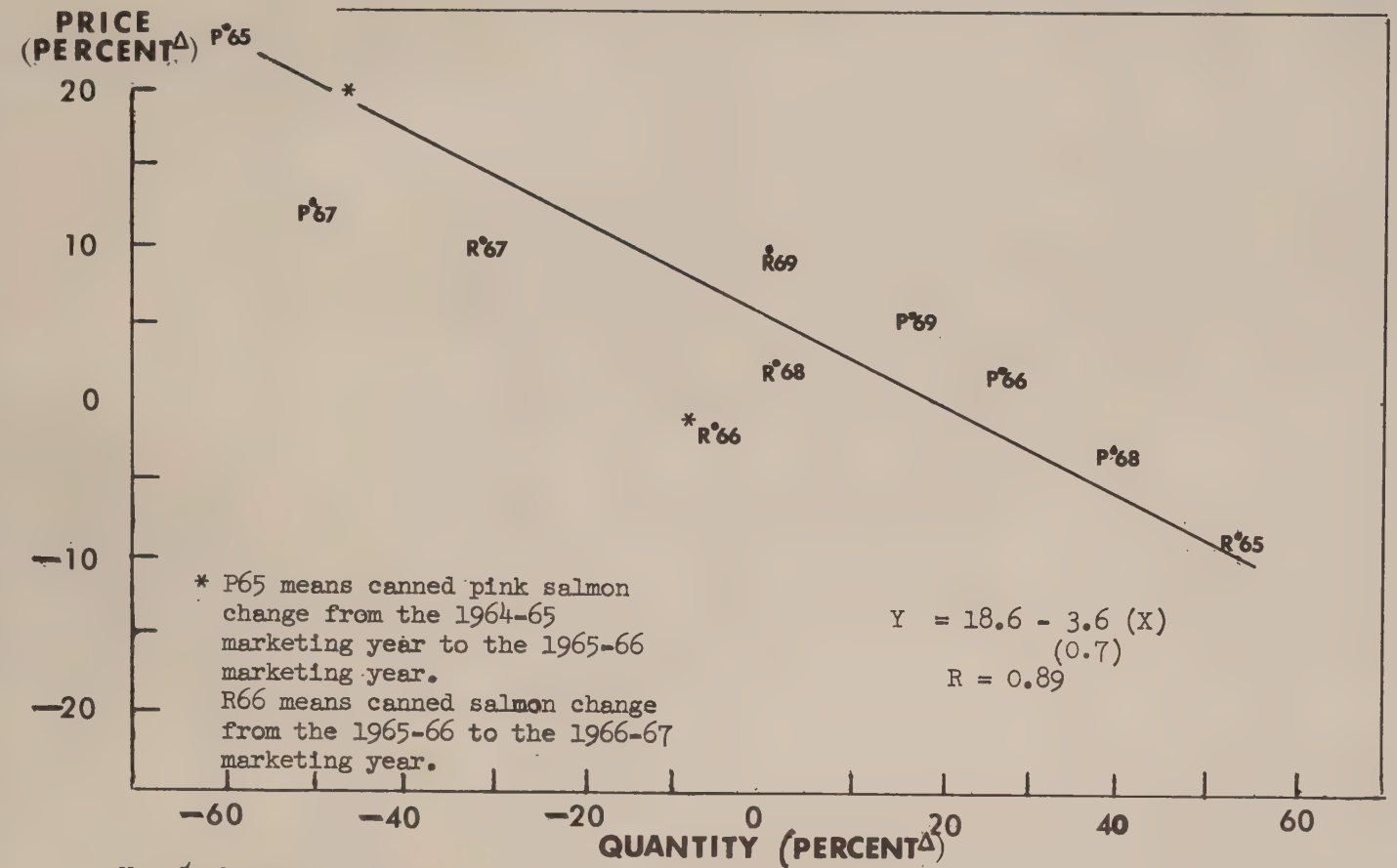
Bristol Bay fishermen and packers are looking forward to a bumper year in 1970 for red salmon. An inshore run of red salmon from 50 to 65 million fish and an optimum catch of 35 million fish is currently forecast, although the range in allowable catch is from 30 to 40 million. The width of the range is determined in part by the degree of intensity of the highseas fishing by Japanese and other fleets on Bristol Bay red salmon.

The 1970 forecast of Kodiak pink salmon is unique because it projects a record return for the even-year cycle. If the forecast is correct, the Kodiak catch should approach 15 million fish. A catch of 560,000 fish is also projected for the Mainland District. These estimates are based on a run of 20 million fish.

Southeastern Alaska is expecting 19 million pinks in the southern section and 9 million in the northern section, with a possible total catch of 19 million for both sections. Cook Inlet, Prince William Sound, and the Alaska Peninsula are all expected to have good but not outstanding runs.

In areas outside Alaska, the 1970 pack, however, will not be large. It

YEAR-TO-YEAR PERCENT CHANGE IN PRICES OF CANNED PINK AND RED SALMON AND TOTAL QUANTITY SOLD IN THE U.S. AND EXPORTED FROM THE 1964-65 MARKETING YEAR TO THE 1969-70 MARKETING YEAR



Y = % change in quantity of canned red or pink salmon sold in the U. S. and exported.
X = % change in price of canned red or pink salmon.
Δ = % change from previous year. Note: Data from table 42.

U. S. Department of the Interior Neg. Econ. 366-70-(5) Bureau of Commercial Fisheries

Figure 15

probably will be an off-year for Puget Sound pink salmon. The Fraser River red salmon run is expected to yield a catch of 4.5 million fish for both United States and Canadian fishermen.

A total Alaska pack of 5.6 million standard cases of salmon and a total U.S. pack near 6.3 million standard cases are predicted--nearly 2 1/2 times the total U.S. pack last year.

Packing at Bristol Bay Does Not Seem to Pose a Problem

The State of Alaska organized a committee to study the salmon run biological information and the catching and packing capacity available at Bristol Bay. The committee determined that the run could be harvested in an orderly manner by U.S. fishermen and processors without undue problems if the run were not above expectations and the harvesting were to start early and continue late during the run.

The estimated harvest of 35 million red salmon will yield about 2.3 million standard cases. Red salmon are normally smaller in size during big runs. The previous peak for Bristol Bay was 1.5 million standard cases in 1965.

Processing facilities at Bristol Bay amount to the equivalent of 35 one-pound-tall canning lines with a sustained capacity of 3,000 cases per line per day and a forced capacity of 4,000 cases. Additional lines could be shifted to Bristol Bay within 3 days notice. Cannery capacity at Bristol Bay appears to be adequate to handle the coming bonanza of red salmon.

The Alaska committee stressed, however, that to make full use of the fish available, fishermen must begin the fishing early and remain until completion of the run. Instead of the customary beginning date of June 20, the State of Alaska is considering allowing fishermen to start 1 week earlier and continue catching to the end instead of the middle of July.

Demand

Canned Salmon--1970-71

U.S. Consumption Near 3.0 million cases at 1969-70 Prices

During the July 1969 to June 1970 marketing year, about 3.0 million standard cases will be consumed in the United States with the wholesale price of pink salmon averaging $32.50 per case, and $45 for red salmon. The highest amount of salmon consumed during the past 6 years was 3.7 million cases in 1964-65 and 1966-67. In 1966-67 prices were $27.77 per case for pink salmon and $35.94 for red salmon.

Exports Up

Canned salmon exports will be about 450,000 standard cases during the July 1969 to June 1970 marketing year. Therefore, the total disappearance of U.S. canned salmon will be about 3.4 to 3.5 million cases. If prices stay the same, during the July 1970-June 1971 marketing year as during the last marketing year we can expect about 3.5 million standard cases of canned salmon to be consumed in the United States and exported during that period. This would leave July 1,

1971 stocks in canners' warehouses at 2.8 million cases--a bearish price situation.

Because of this situation canned salmon will be on the USDA Plentiful Foods listing in late summer or fall.

Carryover Down This Year, Up Next Year

The most that the canning industry has carried over into a new marketing year since 1964 was 1.2 million standard cases on July 1, 1964. Since 1966 distributors' stocks have been included. When both canners' and distributors' stocks are considered, the highest July 1 carryover was about 1.8 standard cases in 1967. If the 1970 pack is about 6.3 million standard cases and if a small pack is expected in 1971, then a normal carryover on July 1, 1971 in distributors' and canners' hands would be about 1.8 to 1.9 million cases.

Fresh and Frozen Salmon

Domestic Consumption Up

We expect that more king salmon and silver salmon will go to the fresh and frozen market this year, resulting in a boost in the consumption of fresh and frozen salmon to 40 to 45 million pounds, edible weight. This would be over 10 million pounds more than in 1969.

Exports Expected To Be Up

In 1969, exports of fresh and frozen salmon were 30.6 million pounds, dressed weight, almost twice as much as in 1968. With the bumper salmon runs this year and limited salmon production in Europe, we can expect another sizeable increase in exports of fresh and frozen salmon.

Any increase in the domestic consumption and exports of fresh and frozen salmon will have the affect of reducing the quantity available for canning.

Table 36. Quantity and value of U.S. imports and exports of canned and fresh and frozen salmon quarterly for 1967 and monthly for 1968-69

Year	Canned				Fresh and frozen			
	Quantity		Value		Quantity		Value	
	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports
	Thousand pounds[1]		Thousand dollars		Thousand pounds[2]		Thousand dollars	
1967								
1st quarter	-	6,514	7	4,436	1,025	4,063	720	2,416
2d quarter	9	7,200	46	5,471	2,140	1,290	1,599	743
3d quarter	5	3,035	3	2,575	3,060	6,042	2,363	3,633
4th quarter	51	3,794	36	3,110	2,590	7,516	1,819	5,064
Year	115	20,543	92	15,592	8,815	18,911	6,501	11,856
1968								
1st quarter	2,442	1,632	1,418	1,437	1,368	2,446	1,052	1,699
2d quarter	2,179	1,163	1,199	961	1,271	802	978	497
3d quarter	319	1,237	186	917	4,410	5,664	3,394	3,175
4th quarter	15	1,694	13	1,288	2,763	7,322	1,640	4,705
Year	4,955	5,726	2,816	4,603	9,812	16,234	7,064	10,076
1969								
January	164	337	95	268	378	1,841	292	1,082
February	167	439	96	350	579	2,047	507	1,152
March	404	702	234	606	512	1,904	349	958
1st quarter	735	1,478	425	1,224	1,469	5,792	1,148	3,192
April	485	824	326	616	636	1,401	471	831
May	110	790	67	505	480	684	403	359
June	181	405	109	310	446	876	397	604
2d quarter	776	2,019	502	1,431	1,562	2,961	1,271	1,794
July	101	293	48	196	719	2,374	603	1,633
August	197	1,980	118	1,043	834	5,485	753	3,451
September	73	2,407	46	2,131	1,038	3,336	827	2,221
3d quarter	371	4,680	212	3,370	2,591	11,195	2,183	7,305
October	349	3,306	227	2,447	1,355	6,511	1,209	3,894
November	170	2,271	116	1,723	816	2,628	525	1,824
December	13	1,782	11	1,370	631	1,466	559	1,051
4th quarter	532	7,359	354	5,540	2,802	10,605	2,293	6,769
Year	2,414	15,536	1,493	11,565	8,424	30,553	6,892	19,060

1/ - Edible weight.
2/ - Dressed weight.

Table 37. Total supplies of canned salmon and monthly shipments in percentages by species, 1967-68, 1968-69 and 1969-70 marketing years

Marketing year / Species	Quantity available			Percentage shipped									
	Total pack	July 1 stock 1/	Total	July-Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	Total
	Thousand actual cases			Percent									
July '67-June '68													
King	174.3	51.9	226.2	29.1	6.1	5.9	0.1	8.6	0.4	8.0	3.3	3.3	64.1
Red	1,558.7	905.0	2,463.6	29.1	3.0	5.8	5.0	6.1	5.3	6.7	3.3	3.0	67.8
Coho	287.4	92.2	379.6	37.1	8.5	9.3	5.0	5.1	5.1	5.0	3.6	.2	78.9
Pink	838.7	539.7	1,378.4	44.0	3.8	9.0	5.4	7.1	6.8	9.2	5.7	3.9	93.9
Chum	384.1	104.5	488.6	29.9	7.3	14.5	10.2	1.9	6.9	6.7	4.0	3.7	85.1
Total	3,243.2	1,693.2	4,936.4	34.2	4.2	7.9	5.4	6.0	5.6	7.3	4.1	3.1	77.8
July '68-June '69													
King	117.8	71.9	189.7	32.0	6.7	4.5	5.2	4.7	8.5	8.0	5.4	4.2	79.2
Red	1,210.2	789.1	1,999.2	37.0	1.7	6.4	6.1	7.3	9.3	5.4	7.6	6.0	86.8
Coho	264.8	71.3	336.0	34.0	3.4	9.7	2.3	12.0	5.3	6.3	4.2	4.6	81.8
Pink	1,983.2	189.1	2,172.3	30.6	7.4	9.0	2.0	8.9	7.4	3.8	4.5	6.9	80.5
Chum	701.4	69.8	771.2	25.5	4.1	3.9	5.1	6.5	9.1	1.5	3.3	7.7	66.7
Total	4,277.3	1,191.2	5,468.5	32.5	4.6	7.2	4.1	8.1	8.3	4.4	5.5	6.4	81.1
July '69-June '70													
King	119.6	39.2	158.8	33.2	8.9	15.1	7.8	9.6					
Red	1,427.8	263.7	1,691.4	38.1	9.4	5.9	6.9	8.5					
Coho	121.5	60.5	182.0	44.4	6.7	4.7	9.4	5.6					
Pink	1,525.8	476.8	2,002.6	29.0	8.8	5.9	10.6	12.2					
Chum	223.0	255.6	478.6	35.8	7.1	5.5	7.9	9.5					
Total	3,417.7	1,095.7	4,513.4	33.9	8.5	6.1	8.8	10.2					

Figures may not add to total because of rounding.

1/ - Canners stocks only. Does not include 540,000 actual cases in distributors hands on July 1, 1967, and 492,000 on July 1, 1968.

Source: Division of Industry Statistics, National Canners' Association.

Table 38. Total supplies of canned salmon and monthly shipments in percentages by size of pack, 1967-68, 1968-69 and 1969-70 marketing years

Marketing year / Size of pack	Quantity available: Total pack	July 1 stock 1/	Total	Percentage shipped: July-Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	Total
	Thousand actual cases			Percent									
July '67-June '68													
48/¼ lb.	578.9	214.2	793.1	34.6	4.7	6.6	12.0	5.2	6.0	9.9	0.9	1.0	77.1
48/½ lb.	1,499.2	559.2	2,058.4	28.7	2.1	7.3	.9	5.7	5.1	6.3	5.4	4.6	66.1
48/1 lb.	1,088.2	871.2	1,959.4	39.5	5.9	8.0	7.6	7.1	6.0	7.7	5.1	3.2	90.1
12/4 lb.	76.9	48.6	125.4	41.0	9.5	22.0	3.6	0.4	4.4	1.8	.8	3.7	85.6
Total	3,243.2	1,693.2	4,936.4	34.2	4.2	7.9	5.4	6.0	5.6	7.3	4.1	3.1	77.8
July '68-June '69													
48/¼ lb.	471.2	182.2	653.4	42.2	4.7	9.9	3.9	6.9	15.1	5.8	4.8	4.6	98.0
48/½ lb.	981.9	767.1	1,749.0	36.7	3.9	5.0	4.5	5.8	5.6	7.7	8.0	7.2	84.4
48/1 lb.	2,692.7	224.4	2,917.2	28.4	6.3	8.0	4.0	9.6	8.8	2.2	4.0	7.0	78.3
12/4 lb.	131.4	17.5	148.9	20.8	20.8	6.4	2.4	9.3	.5	2.5	8.4	9.9	80.9
Total	4,277.3	1,191.2	5,468.5	32.5	4.6	7.2	4.1	8.1	8.3	4.4	5.5	6.4	81.1
July '69-June '70													
48/¼ lb.	451.3	75.5	526.8	31.4	7.0	6.7	7.2	7.8					
48/½ lb.	1,064.3	326.7	1,391.0	35.0	9.7	5.1	6.9	9.2					
48/1 lb.	1,788.8	665.0	2,453.8	34.4	8.3	6.2	10.2	11.3					
12/4 lb.	113.3	28.5	141.8	23.4	5.2	13.3	8.2	7.8					
Total	3,417.7	1,095.7	4,513.4	33.9	8.5	6.1	8.8	10.2					

1/ - Canners stocks only. Does not include 540,000 actual cases in distributors hands on July 1, 1967, and 492,000 on July 1, 1968.
Figures may not add to total because of rounding.
Source: Division of Industry Statistics, National Canners' Association.

Table 39. U.S. monthly wholesale prices of canned salmon and retail prices of salmon steaks, 1968-70

	Wholesale price 1/: Red (sockeye) 1968	1969	1970	Pink 1968	1969	1970	Chum 1968	1969	1970	King (chinook) 1968	1969	1970	Retail price 3/: Salmon steaks, frozen 1968	1969	1970
	Dollars per case 2/												Cents per lb.		
January	40.00	40.50	45.25	32.50	29.70	31.60	29.00	27.00	28.80	34.00	34.00	36.50	143.8	175.8	-
February	40.00	40.50	45.44	32.50	30.00	31.25	29.00	26.75	28.25	34.00	34.00	37.13	151.8	178.3	-
March	40.00	40.63	45.50	32.80	30.00	32.50	29.30	26.50	28.50	34.00	34.00	37.00	146.0	189.5	-
April	40.00	41.00		33.00	30.00		29.50	26.50		34.00	34.00		165.6	187.5	
May	40.00	41.00		33.00	30.00		29.50	26.50		34.00	34.00		159.5	168.1	
June	40.00	41.25		33.00	30.80		29.50	26.88		34.00	34.00		167.6	184.5	
July	40.00	43.30		33.00	32.40		29.50	28.50		34.00	34.00		169.7	-	
August	40.70	43.75		32.30	32.50		29.30	28.50		34.00	34.00		160.8	-	
September	41.00	44.13		31.00	32.50		28.50	28.50		34.00	35.00		158.8	-	
October	41.00	45.13		31.00	32.50		28.13	28.50		34.00	36.50		154.9	-	
November	40.50	45.25		30.00	32.50		27.38	28.88		34.00	36.75		163.0	-	
December	40.50	45.25		29.75	32.50		27.00	29.00		34.00	36.50		169.6	-	
Average	40.31	42.64		31.99	31.28		28.80	27.67		34.00	34.73		159.3	180.6	

1/ - Average of the weekly prices reported by Seattle brokers and canners.
2/ - Forty-eight one-pound talls.
3/ - Salmon steaks (frozen) retail prices at New York, N.Y., not reported in the second half of 1969.

Table 40. U.S. canned salmon exports to United Kingdom and other countries by months, July 1964 to March 1970

Month	1963 - 1964			1964 - 1965			1965 - 1966			1966 - 1967			1967 - 1968			1968 - 1969			1969 - 1970		
	United Kingdom	Other countries	Total exports	United Kingdom	Other countries	Total exports	United Kingdom	Other countries	Total exports	United Kingdom	Other countries	Total exports	United Kingdom	Other countries	Total exports	United Kingdom	Other countries	Total exports	United Kingdom	Other countries	Total exports
	Million Pounds[1]																				
July	0.2	0.1	0.3	0.6	0.2	0.8	0.5	0.3	0.8	0.4	0.3	0.7	1.4	0.2	1.6	0.1	0.1	0.2	0.1	0.2	0.3
August	2/	.1	.1	2.0	.3	2.3	1.2	1.2	2.4	.6	.5	1.1	.2	.1	.3	.4	.2	.6	1.8	.2	2.0
September	.9	.3	1.2	2.3	.7	3.0	2.6	1.0	3.6	.6	.4	1.0	.9	.3	1.2	.2	.3	.5	1.8	.6	2.4
October	.8	.6	1.4	1.8	.9	2.7	3.1	1.1	4.2	2.3	.7	3.0	.9	.5	1.4	.2	.4	.6	1.0	2.3	3.3
November	1.0	.2	1.2	1.8	1.8	3.6	.3	.7	1.0	.8	1.4	2.2	.8	.3	1.1	.2	.1	.3	1.0	1.3	2.3
December	1.2	.2	1.4	1.9	1.0	2.9	1.4	.4	1.8	1.5	.4	1.9	1.1	.1	1.2	.6	.2	.8	.6	1.2	1.8
January	.3	.2	.5	1.5	.7	2.2	1.7	.5	2.2	1.7	.6	2.3	.5	.2	.7	.1	.2	.3	.5	.8	1.3
February	1.3	.2	1.5	1.0	.6	1.6	1.6	.3	1.9	2.2	.6	2.8	.4	.1	.5	.1	.3	.4	.7	1.1	1.8
March	.3	.3	.6	1.9	.6	2.5	2.5	.7	3.2	1.1	.3	1.4	.2	.2	.4	.5	.2	.7	.2	.7	.9
April	1.1	.3	1.4	.8	.6	1.4	.4	.4	.8	2.5	.3	2.8	2/	.1	.1	.6	.2	.8			
May	.7	.1	.8	1.2	.4	1.6	1.1	.2	1.3	2.1	.3	2.4	.2	.3	.5	.5	.3	.8			
June	.6	.2	.8	1.2	.5	1.7	.8	.3	1.1	1.5	.5	2.0	.4	.2	.6	.2	.2	.4			
TOTAL	8.4	2.8	11.2	18.0	8.3	26.3	17.2	7.1	24.3	17.3	6.3	23.6	7.0	2.6	9.6	3.7	2.7	6.4			
	Percent of Total Exports																				
Percent	75.0	25.0	100.0	68.4	31.6	100.0	70.8	29.2	100.0	73.3	26.7	100.0	72.9	27.1	100.0	57.8	42.2	100.0			

1/ Canned weight
2/ Less than 0.05

Source: Compiled from reports of U.S. Dept. of Commerce, Bureau of the Census

Table 41. U.S. canned salmon disappearance in domestic and foreign markets by 6-month periods, July 1964 to December 1969

Year and Period	Primary Disappearance					
	Domestic consumption	Net exports	Total	Domestic consumption	Net exports	Total
	Thousand standard cases 1/			Percent of total		
1964						
July-Dec.	1,768.5	313.4	2,081.9	84.9	15.1	100.0
1965						
Jan.-June	1,887.1	229.2	2,116.3	89.2	10.8	100.0
July-Dec.	1,816.1	287.6	2,103.7	86.3	13.7	100.0
1966						
Jan.-June	1,079.4	184.5	1,263.9	85.4	14.6	100.0
July-Dec.	2,165.8	230.2	2,396.0	90.4	9.6	100.0
1967						
Jan.-June	1,502.7	285.7	1,788.4	84.0	16.0	100.0
July-Dec.	1,517.6	141.2	1,658.8	91.5	8.5	100.0
1968						
Jan.-June	1,138.5	-38.1	1,100.4	103.5	-3.5	100.0
July-Dec.	1,619.7	54.1	1,673.8	96.8	3.2	100.0
1969						
Jan.-June	1,395.9	41.4	1,437.3	97.1	2.9	100.0
July-Dec.	1,466.7	232.0	1,698.7	86.3	13.7	100.0
1970						
Jan.-June						

1/ Equivalent of 48 1-pound cans.

Table 42. Domestic sales and exports and wholesale prices of canned red salmon and pink salmon by marketing year from July 1964 through June 1970 with percentage changes from the previous marketing year

July-June marketing year	Total domestic sales and exports		Wholesale price per case		Percent change from previous year			
					In total domestic sales & exports		In prices	
	Red	Pink	Red	Pink	Red	Pink	Red	Pink
	1,000 std. cases		Dollars		Percent			
1964-65	843.8	2,322.6	39.77	21.39				
1965-66	1,469.8	1,256.1	36.56	27.19	54	-60	-8.4	23.9
1966-67	1,404.9	1,646.9	35.94	27.77	- 5	27	-1.7	2.1
1967-68	1,025.9	985.3	39.80	31.51	-31	-50	10.2	12.8
1968-69	1,047.3	1,475.7	40.71	30.63	2	40	2.3	-3.0
1969-70 1/	1,054.2	1,747.7	44.96	32.31	1	17	9.9	5.3

1/ Assumes July 1, 1970 stocks in canners' warehouses will be zero and April 1970 prices continue through June.

CANNED TUNA

Review--1969

Supply

U.S. Landings Declined Slightly

United States and Puerto Rico tuna landings totaled 199,400 tons last year, slightly lower than a year before (table 45). The drop in skipjack and albacore tuna landings was almost compensated by the increase in yellowfin. Pacific Coast landings were better than the previous year while those in other areas were not as good.

Pacific albacore have migrated to the north in recent years, and fewer albacore have been caught in California. Oregon and Washington again had most of the landings in 1969--about 17,250 tons. California fell behind in albacore landings to 5,800 tons. The total was almost 5,000 tons less than in 1968.

Skipjack landings of 45,850 tons were almost 11,000 tons lower than in 1968. Yellowfin landings of 123,000 tons, an increase of 15,600 tons from the year before--nearly compensated for the loss of landings in other species.

Tuna landings in Hawaii and the Atlantic Coast were small in comparison with other areas (table 45). Tuna landings on the Pacific Coast comprised 70 percent of the total United States and Puerto Rico tuna landings in 1968 and 75 percent in 1969.

Yellowfin Catch Quota

The yellowfin tuna fishery of the eastern tropical Pacific is regulated through the IATTC (Inter-American Tropical Tuna Commission) of which Costa Rica, Mexico, Panama, the United States and Canada, are members. Ecuador, and Japan although not members, cooperate in the conservation program. Under the conservation agreement a quota of 120,000 tons of yellowfin was established for 1969. The abundance of yellowfin and the greatly increased capacity of the tuna fleet fishing in this area brought about the closure of the yellowfin fishing season in the regulatory area in the middle of April, about 2 months sooner than the closing date in the previous year.

At the end of 1969, 125,300 tons of yellowfin were caught in the area, 10.2 percent higher than in 1968 and 4 percent higher than the quota.

Exvessel Prices of Tuna Slightly Higher

Average exvessel prices of tuna were slightly higher in 1969 than in the previous year. Albacore tuna in California averaged $450 per ton for the year, up from $425 in 1968. Skipjack and yellowfin were both $16 per ton higher than the year before averaging $274 and $325 per ton respectively last year. Bluefin increased $12 to $301 per ton.

Imports Declined in Raw Tuna But Increased in Canned

Imports of brine-pack tuna were 73 million pounds in 1969--9 percent above 1968 (table 47). About 90 percent of the imported canned tuna came from Japan. Total imports of canned tuna in 1969 were 15.7 percent

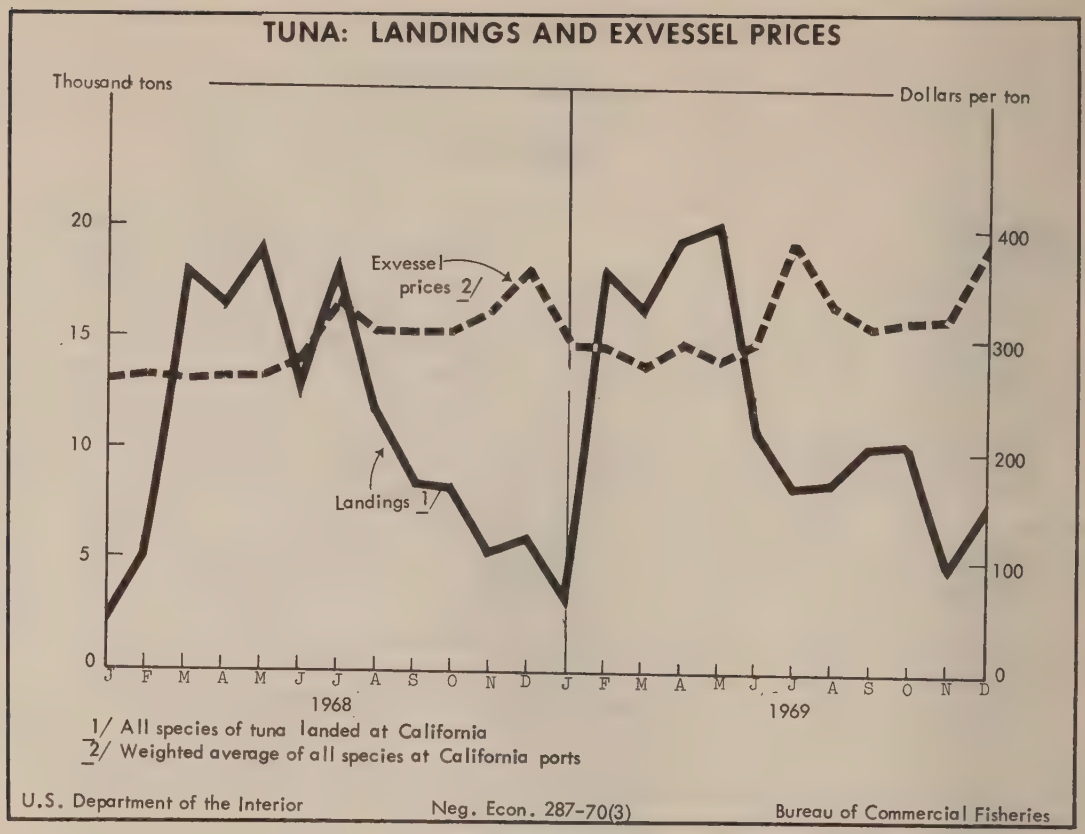


Figure 16

of the total quantity of canned tuna available in the United States--the highest since 1961.

Imports of fresh and frozen albacore tuna increased 9,400 tons to 75,800 tons last year, but light meat species of fresh and frozen tuna dropped 11,200 tons to 79,400 tons and loins and discs dropped 2,600 tons to 1,100 tons. Total imports were 156,200 tons last year, a drop of 4,400 tons from 1968 but an increase of 6,000 tons from the last 5-year average (table 48).

Cannery Production Almost the Same As in 1968

The pack of canned tuna in the United States, Puerto Rico, and American Samoa in 1969 was almost 20 million standard cases--about the same as in 1968 (table 46). Nearly half (47 percent) of the total output was produced in California. The combined production from Hawaii and American Samoa was 14 percent of the total and 20 percent higher than the year before. Output from Puerto Rico provided 31 percent of the total production but declined by 2.4 percent from the previous year. The declines were about enough to offset the increases, resulting in no change between the total packs of 1968 and 1969.

Demand

Demand Slightly Stronger

The decline in production of canned salmon last year was one of the major factors that slightly raised the demand for canned tuna.

The firmness of wholesale prices was the result of a growing market and a relatively static production. Prices on solid albacore halves advanced from $16.72 per case in 1968 to $18.43 last year (table 49). Promotion allowances were not offered as often as in 1968. Wholesale prices for light chunk halves averaged about $1 per case higher in 1969. But when promotional allowances were taken into consideration, prices of light chunk tuna were held steady part of the time in 1969.

The annual average retail price of light chunk (6 to 6 1/2 oz. cans) in 1969 were 34.5 cents a can--a decline of 1 percent from 1968 but an increase of 2.2 percent from the average of the previous 5 years (table 49).

OUTLOOK—1970

Supply

The quota for the yellowfin landings in the eastern tropical Pacific remains at 120,000 tons for 1970. Because of intensive fishing effort, yellowfin catch in the eastern tropical Pacific as of May 11 reached 108,510 tons, 9,000 tons more than in 1969. The closing date of yellowfin fishing was set on March 23, 20 days earlier than last year.

Because of import quota restrictions and expected heavy domestic tuna landings as evidenced by the result of the first 4 months of this year, imports of canned tuna may not increase much over the level of 73 million pounds of 1969. Excluding landings by foreign vessels in American Samoa, we expect that 150,000 to 160,000 tons of raw tuna will be imported to the continental United States and Puerto Rico in 1970.

Demand

Demand for canned tuna in the United States has steadily increased since 1950. Consumption of tuna is associated with the changes in personal income, population, and prices of different fishery products, particularly canned salmon.

1970 consumption of canned tuna is not expected to be any more than last year even though prices may stay stable. The major factor is this year's predicted superabundant salmon harvest. The effect on tuna demand, will be felt to some extent in the second half of this year.

Table 43. World production and U.S. consumption of tuna 1960-69

Year	U.S. total imports of tuna	U.S. consumption	Imports as percent of consumption	World production[1]	US consumption as percent of World production
	Million pounds[2]		Percent	Million pounds[2]	Percent
1960	211	353	59.8	1,166	30.3
1961	205	369	55.6	1,334	27.7
1962	245	392	62.5	1,356	28.9
1963	223	384	58.1	1,378	27.9
1964	250	404	61.9	1,345	30.0
1965	248	409	60.6	1,345	30.4
1966	303	456	66.4	1,488	31.6
1967	271	454	59.5	1,499	30.3
1968	287	463	62.0	1,543	30.0
1969	289	469	61.6	N.A.	-

1/ - Source: Figures are for the Free World, from Food and Agriculture Organization of the United Nations.
2/ - Edible weight.

Table 44. Available quantity of canned tuna in the United States, 1960-69
(Edible weight)

Year	U.S. pack from domestic catch[1]		U.S. pack from imported fresh & frozen tuna[2]		Imported canned		Total supply[3]
	Million pounds	% of total	Million pounds	% of total	Million pounds	% of total	Million pounds
1960	142.6	40.4	158.8	45.0	51.8	14.6	353.1
1961	163.9	44.4	146.8	39.7	58.7	15.9	369.3
1962	147.6	37.6	187.9	47.9	56.7	14.5	392.2
1963	160.8	41.8	165.9	43.2	57.5	15.0	384.2
1964	154.2	38.1	195.6	48.4	54.6	13.5	404.5
1965	161.5	39.5	196.9	48.1	51.0	12.4	409.4
1966	153.2	33.6	241.0	52.9	61.6	13.5	455.8
1967	183.2	40.3	205.6	45.3	65.3	14.4	454.2
1968	175.7	37.9	220.3	47.6	67.2	14.5	463.1
1969	179.8	38.3	216.2	46.1	73.1	15.6	469.2

1/ - Includes pack from U.S. catch landed in Puerto Rico. 2/ - Includes tuna canned in American Samoa. 3/ - May not add to total due to rounding.

Table 45. Tuna landings, by region 1960-69
(Round weight)

Region/year	Albacore	Bluefin	Skipjack	Yellowfin	Other[1]	Total[2]
	Thousand Tons					
Pacific Coast						
1960	20.1	6.0	23.2	94.7	-	143.9
1961	16.4	10.4	32.7	96.0	-	155.5
1962	23.0	15.6	46.4	62.0	-	147.0
1963	30.4	15.2	48.3	54.8	-	148.7
1964	24.0	11.6	33.0	74.5	-	143.2
1965	18.6	8.0	42.4	79.3	-	148.2
1966	18.5	17.6	25.5	66.3	-	127.9
1967	24.2	6.8	55.6	70.8	-	157.4
1968p	27.9	6.5	29.6	76.6	-	140.6
1969p	23.8	7.6	23.0	102.2	-	156.6
Atlantic & Gulf						
1960	-	.7	-	-	[3]	.7
1961	-	1.2	-	-	"	1.2
1962	-	3.5	[3]	[3]	"	3.6
1963	-	5.0	2.1	.2	"	7.4
1964	-	3.2	1.1	.1	64	4.6
1965	-	2.3	[3]	-	136	2.5
1966	-	1.3	[3]	-	[3]	1.3
1967	-	2.2	[3]	-	[3]	2.2
1968p	-	.7	.2	.1	-	1.0
1969p		1.4	-	-	-	1.4
Hawaii						
1960	[3]	.6	3.7	.2	[3]	4.5
1961	"	.5	5.5	.2	"	6.2
1962	"	.6	4.7	.2	"	5.5
1963	"	.5	4.1	.2	"	4.8
1964	"	.4	4.5	.3	"	5.2
1965	"	.3	8.1	.2	"	8.7
1966	"	.4	4.7	.3	"	5.3
1967	"	.3	4.0	.3	"	4.6
1968	"	.3	4.7	.2	"	5.2
1969	"	.3	3.1	.2	"	3.6
Puerto Rico						
1960	-	-	2.8	7.6	-	10.5
1961	-	-	5.2	10.3	-	15.5
1962	-	.8	10.0	3.5	-	14.4
1963	-	1.2	15.2	2.0	-	18.5
1964	-	2.2	15.2	6.8	-	24.2
1965	-	1.2	21.0	5.1	-	27.3
1966	-	.6	19.0	12.7	-	32.3
1967	-	.7	38.9	9.4	-	48.9
1968	-	-	23.3	30.5	-	53.8
1969	-	-	14.0	34.1	-	48.1
Total U.S. & Puerto Rico						
1960	20.1	7.3	29.7	102.4	[3]	159.6
1961	16.4	12.1	43.4	106.5	"	178.4
1962	23.0	20.6	61.2	65.7	"	170.5
1963	30.4	21.9	69.7	57.3	"	179.3
1964	24.0	17.4	53.9	81.7	82	177.1
1965	18.6	11.9	71.5	84.6	144	186.7
1966	18.5	19.9	49.2	79.3	[3]	166.9
1967	24.2	10.0	98.5	80.5	"	213.1
1968p	27.9	7.5	57.8	107.4	"	200.8
1969p	23.8	9.3	40.1	136.5	"	209.7

1/ - Unidentified included with other. 2/ - Does not include American Samoa.
3/ - Less than 50 tons. Note: May not add to total due to rounding. p-Preliminary.

Table 46. U.S. pack of canned tuna, by region, 1960-69

Year	Pacific Coast: California	Pacific Coast: Washington & Oregon	Pacific Coast: Total	Hawaii and American Samoa	Total Pacific	Puerto Rico	Total 3/
	Thousand standard cases 1/						
1960	10,715	1,474	12,189	2/	2/	2/	15,305
1961	10,546	1,262	11,808	2/	2/	2/	15,768
1962	10,511	1,471	11,982	2/	2/	2/	17,018
1963	9,075	1,487	10,562	1,430	11,992	3,807	16,556
1964	9,293	1,503	10,796	1,352	12,148	4,845	17,689
1965	9,012	1,761	10,773	1,885	12,658	4,874	18,099
1966	9,613	1,541	11,154	2,713	13,867	5,896	19,954
1967	9,342	1,509	10,851	2,733	13,854	6,397	19,682
1968							
1st quarter	1,553	163	1,716	429	2,145	1,154	3,359
2d quarter	3,035	234	3,269	679	3,948	1,978	6,034
3d quarter	2,700	1,132	3,832	685	4,517	1,723	6,429
4th quarter	1,755	250	2,005	565	2,570	1,545	4,189
Year	9,043	1,778	10,821	2,358	13,179	6,401	20,012
1969 4/							
January	269	131	400	145	545	260	805
February	950	115	1,065	91	1,156	254	1,410
March	917	18	935	170	1,105	610	1,715
1st quarter	2,136	264	2,400	406	2,806	1,124	3,930
April	1,181	38	1,219	156	1,375	523	1,898
May	1,175	96	1,271	143	1,414	800	2,214
June	785	48	833	213	1,046	738	1,784
2d quarter	3,141	182	3,323	512	3,835	2,061	5,896
July	671	116	787	314	1,101	554	1,655
August	709	361	1,070	261	1,331	287	1,618
September	645	153	798	286	1,084	557	1,641
3d quarter	2,025	630	2,655	861	3,516	1,398	4,914
October	740	67	807	220	1,027	811	1,838
November	961	304	1,265	181	1,446	364	1,810
December	348	67	415	652	1,067	488	1,555
4th quarter	2,049	438	2,487	1,053	3,540	1,663	5,203
Year	8,991	1,533	10,524	3,116	13,640	6,334	19,975

1/ - Various sized cases converted to the equivalent of 48 No. ½ cans to the case.
2/ - Not available.
3/ - Atlantic Coast pack figures are included in the total column only for 1960-68. In 1969 Atlantic Coast pack is included in Hawaii and American Samoa pack.
4/ - The monthly data do not add to total because they have not been revised and will be revised in the next report.
Figures may not add to total because of rounding.

Table 47. U.S. imports of canned tuna annually for 1960-67, quarterly for 1968, and monthly 1969

Year	Brine pack			Oil	Total canned tuna imports
	Japan	All other countries	Total	All countries	
	Million pounds 1/				
1960	42.6	8.5	51.2	0.6	51.8
1961	46.5	11.7	58.2	.4	58.7
1962	47.1	9.2	56.4	.4	56.7
1963	48.3	8.9	57.3	.2	57.5
1964	44.5	9.9	54.4	.2	54.6
1965	40.7	10.0	50.6	.2	51.0
1966	51.5	9.9	61.4	.2	61.6
1967	57.8	7.3	65.1	.2	65.3
1968					
1st quarter	13.0	2.0	15.0	2/	15.0
2d quarter	14.9	1.7	16.6	2/	16.7
3d quarter	14.7	2.5	17.3	2/	17.3
4th quarter	16.3	1.8	18.2	2/	18.2
Year	59.0	8.0	67.0	.2	67.2
1969					
January	1.6	.5	2.1	2/	2.1
February	3.9	.9	4.8	2/	4.8
March	4.9	.5	5.3	2/	5.3
1st quarter	10.4	1.9	12.2		12.2
April	8.4	.9	9.4	2/	9.4
May	6.9	.7	7.6	2/	7.6
June	4.5	1.2	5.6	2/	5.6
2d quarter	19.8	2.8	22.6		22.6
July	7.8	.7	8.5	2/	8.5
August	8.0	.4	8.4	2/	8.4
September	4.7	.3	5.0	2/	5.0
3d quarter	20.5	1.4	21.9		21.9
October	5.8	.5	6.3	2/	6.3
November	4.8	.5	5.3	2/	5.3
December	4.2	.5	4.7	2/	4.7
4th quarter	14.8	1.5	16.3		16.3
Year	65.4	7.5	72.9	.2	73.1

1/ - Product weight.
2/ - Less than 50,000 pounds.
Figures may not add to total because of rounding.

Table 48. U.S. imports of fresh and frozen tuna, annually for 1960-67, quarterly 1968, and monthly 1969
(Import weight)

Year	Whole or dressed			Loins & discs	Total
	Albacore	Other	Total		
	Thousand tons				
1960	34.9	82.4	117.3	3.4	120.7
1961	36.0	62.6	98.6	4.2	102.7
1962	42.0	94.3	136.2	5.3	141.5
1963	37.7	77.7	115.4	6.1	121.4
1964	62.5	81.4	143.9	7.5	151.4
1965	67.6	69.5	137.1	6.0	143.2
1966	62.9	90.5	153.4	7.6	161.0
1967	63.7	66.8	130.5	4.0	134.5
1968					
1st quarter	17.4	13.4	30.7	1.2	31.9
2d quarter	13.8	26.0	39.8	.9	40.7
3d quarter	19.1	26.8	45.9	.7	46.7
4th quarter	16.2	24.4	40.6	.8	41.4
Year	66.4	90.6	157.0	3.7	160.6
1969					
January	7.3	5.2	12.5	.2	12.7
February	2.4	3.1	5.5	1/	5.5
March	5.2	5.8	11.0	1/	11.0
1st quarter	14.9	14.1	29.0	.3	29.3
April	5.9	7.2	13.1	1/	13.1
May	2.2	9.8	12.0	1/	12.1
June	5.1	14.1	19.2	.1	19.3
2d quarter	13.2	31.1	44.3	.2	44.5
July	5.9	5.0	10.9	.2	11.1
August	7.5	4.2	11.6	.2	11.8
September	9.2	6.0	15.2	1/	15.2
3d quarter	22.5	15.2	37.7	.4	38.1
October	4.7	7.9	12.6	.1	12.7
November	14.7	5.2	19.9	1/	19.9
December	5.8	5.9	11.7	1/	11.7
4th quarter	25.2	19.0	44.2	.2	44.4
Year	75.8	79.4	155.2	1.1	156.2

1/ - Less than 500 tons.
Figures may not add to total because of rounding.
Data do not include landings by foreign vessels in American Samoa.

Table 49. Monthly U.S. canned tuna wholesale, import, and retail prices, 1965-70

Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average
	Dollars per case												
Wholesale 1/ - Advertised brands													
White solid (No. ½ - 7 oz. 48's)													
1965	15.13	15.13	15.13	15.13	15.13	15.13	15.13	15.13	15.13	15.13	15.13	15.13	15.13
1966	16.00	16.00	17.75	17.75	16.63	16.63	16.63	16.63	16.62	16.67	16.68	16.88	16.74
1967	16.88	16.88	16.88	16.49	16.10	16.10	16.10	16.10	16.10	16.10	16.35	16.35	16.37
1968	16.35	16.34	16.35	16.35	16.60	16.85	16.85	16.85	16.85	16.85	16.85	17.65	16.72
1969	17.85	17.85	17.85	18.05	18.10	18.10	18.41	18.60	18.70	19.10	19.23	19.35	18.43
1970	19.35	19.35	19.55	19.85									
Light chunk (No. ½ - 6½ oz. 48's)													
1965	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50
1966	14.25	14.25	15.85	15.85	14.63	14.63	14.40	14.15	14.15	14.15	14.15	14.15	14.55
1967	14.51	14.15	14.15	13.83	13.50	13.50	13.50	13.50	13.50	13.50	13.75	13.56	13.71
1968	13.50	13.50	14.35	14.35	14.35	14.35	14.35	14.35	14.35	14.35	14.35	14.75	14.24
1969	14.85	14.85	14.85	14.85	14.85	14.85	14.91	15.10	15.25	15.85	15.98	16.35	15.19
1970	16.35	16.35	16.49	16.70									
Wholesale 1/ - Private label													
White solid (No. ½ - 7 oz. 48's)													
1965	12.88	12.63	12.75	12.75	12.75	12.75	12.75	12.75	12.50	12.25	12.25	12.25	12.61
1966	12.63	12.63	14.38	14.38	14.38	14.38	14.38	14.38	14.37	14.37	14.37	13.75	14.12
1967	13.75	13.70	13.70	13.50	13.25	13.25	13.25	13.25	13.25	13.25	13.25	13.25	13.39
1968	13.25	13.25	13.85	14.25	14.25	14.25	14.25	14.25	14.25	14.25	14.25	14.25	14.05
1969	14.25	14.25	14.25	14.25	14.25	14.25	14.50	15.25	15.35	15.75	15.75	16.75	14.90
1970	16.75	16.75	16.85	17.00									
Light chunk (No. ½ - 6½ oz. 48's)													
1965	9.63	9.63	9.50	9.38	9.50	9.63	9.63	9.63	9.63	9.63	9.63	9.63	9.59
1966	10.75	10.25	13.85	13.85	12.75	12.75	12.00	11.75	11.75	11.75	11.94	12.00	12.12
1967	12.00	11.99	11.95	11.65	11.35	11.35	11.35	11.35	11.35	11.35	10.75	10.75	11.43
1968	10.75	10.75	11.75	11.75	11.75	11.75	11.75	11.75	11.75	11.75	11.75	11.75	11.58
1969	11.75	11.75	11.75	11.75	11.75	11.75	11.79	11.88	11.99	12.50	12.50	12.88	12.00
1970	12.88	12.88	12.93	13.00									

(continued)

Table 49. Monthly U.S. canned tuna wholesale, import, and retail prices, 1965-70 (continued)

Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average
					Dollars per case								
Imported 2/ (brine pack)													
White solid (No. ½ - 7 oz. 48's)													
1965	12.88	12.63	12.75	12.75	12.75	12.75	12.75	12.75	12.50	12.25	12.25	12.25	12.61
1966	12.63	13.63	14.38	14.38	14.38	14.38	14.38	14.38	14.38	14.38	14.38	14.38	14.17
1967	14.38	14.38	14.38	14.38	13.64	12.90	12.90	12.90	12.90	13.40	14.16	14.16	13.71
1968	14.12	13.95	13.95	13.95	13.95	13.95	13.95	13.95	13.95	13.95	13.95	14.56	14.01
1969	14.41	14.41	14.41	14.47	14.51	14.51	14.63	15.00	15.26	15.69	15.72	15.81	14.90
1970	15.81	15.81	16.15	16.18									
Light solid (No. ½ - 7 oz. 48's)													
1965	10.00	10.00	10.00	10.25	10.25	10.25	10.25	10.25	10.25	10.25	10.25	10.25	10.19
1966	10.75	10.75	14.00	14.00	14.12	14.12	14.12	14.12	14.12	14.12	14.12	14.12	13.54
1967	14.12	14.12	14.12	14.12	12.26	10.40	10.40	10.40	10.40	10.71	11.18	11.18	11.95
1968	11.15	11.02	11.02	11.02	11.02	11.02	11.02	11.02	11.02	11.02	11.02	11.39	11.06
1969	11.27	11.27	11.27	11.32	11.37	11.37	11.40	11.50	11.78	12.19	12.27	12.51	11.63
1970	12.51	12.51	13.11	13.26									
					Cents per can								
Retail 3/													
Light chunk (6 - 6½ oz. cans)													
1965	32.4	32.2	32.0	31.8	31.8	31.9	31.9	32.2	32.2	32.1	31.8	31.9	32.0
1966	32.2	32.9	34.2	34.9	36.2	36.3	36.4	36.4	36.3	35.7	35.8	36.1	35.3
1967	35.9	35.5	35.5	35.3	35.2	35.1	34.6	34.3	34.2	34.4	34.4	34.4	34.9
1968	34.3	34.2	33.7	33.8	34.5	34.7	34.6	34.9	34.9	34.9	34.8	35.0	34.5
1969	35.1	35.4	35.1	35.3	35.6	35.5	35.4	35.7	35.8	36.3	36.5	36.9	35.7
1970	37.6	39.8	38.3										

1/ - Reported by San Diego brokers and cannery representatives, f.o.b. canner's terminal. Quotes do not include trade or promotional allowances. 2/ - Wholesale price ex-doc Los Angeles.
3/ - Average retail price in leading cities in the United States as collected and published by the Bureau of Labor Statistics.

Table 50. Monthly prices for imported raw tuna in the United States, 1964-70[1/]

Species/ Year	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average
	Dollars per ton												
Albacore[2/]	(clipper caught, over 20 lbs.)												
1964	355	350	350	348	340	320	323	328	308	303	295	295	326
1965	305	305	313	318	310	310	316	315	330	N.A.	423	430	334
1966	515	530	503	510	510	510	495	463	475	500	500	500	501
1967	500	438	449	405	405	433	480	472	472	467	461	439	451
1968	453	450	452	468	465	459	449	456	451	462	458	461	456
1969	460r	460	476	472	485	495	503	506	506	510	-	516	490
1970	538	542	540	611									
Yellowfin[2/]	(g&g, 20-100 lbs.)[3/]												
1964	335	325	330	325	323	323	308	313	303	308	306	N.A.	318
1965	325	313	309	310	310	311	314	315	315	N.A.	413	418	332
1966	480	523	498	485	455	435	435	413	418	450	460	448	458
1967	450	395	414	353	360	402	402	382	388	388	406	N.A.	388
1968	407	398	396	380	372	373	368	368	372	371	370	371	378
1969	370	364	370	374	389	399	400	385	387	391	398	397	386
1970	402	429	461	470									

N.A. - Not available.

1/ - Midpoints of price ranges used.

2/ - Prices quoted are f.o.b. Japan, based on sales made to California canners. Prices c.i.f. West Coast about $50 higher.

3/ - For equivalent round weight price of gilled and gutted (g&g) yellowfin, divide by factor of 1.11.

Table 51. Sources and disposition of canned sardines, annually 1950-69

Year	Sources				Disposition			
	Production[1]	Imports[2]	Beginning stocks[3]	Total	Ending stocks[3]	Exports	Apparent consumption	
							Total	Per capita
	Million pounds[4]							Pounds
1950	306.2	32.5	N.A.	338.7	N.A.	102.3	236.4	1.56
1951	168.1	29.3	"	197.4	"	126.6	70.8	.46
1952	87.4	31.0	"	118.4	"	39.9	78.5	.50
1953	68.0	57.3	"	125.3	"	10.0	115.3	.73
1954	128.9	45.2	"	174.1	"	117.2	156.9	.97
1955	93.4	30.8	"	124.2	16.4	46.6	61.2	.37
1956	86.2	29.0	16.4	131.6	25.0	39.6	67.0	.40
1957	74.3	34.5	25.0	133.8	31.5	15.3	87.0	.51
1958	149.1	39.2	31.5	219.8	27.2	18.5	174.1	1.00
1959	75.0	32.8	27.2	135.0	25.3	38.7	71.0	.40
1960	74.5	38.0	25.3	137.8	29.6	21.2	87.0	.48
1961	36.5	53.6	29.6	119.7	8.0	7.6	104.1	.57
1962	56.1	65.1	8.0	129.2	32.0	7.8	89.4	.48
1963	40.5	50.1	32.0	122.6	31.1	3.7	87.8	.47
1964	25.7	53.7	31.1	110.5	18.3	3.3	88.9	.46
1965	30.0	53.0	18.3	101.3	18.5	3.4	79.4	.41
1966	31.2	67.3	18.5	117.0	13.8	3.6	99.6	.51
1967	29.3	61.9	13.8	105.0	13.2	1.4	90.4	.46
1968	39.8	58.9	13.2	111.9	23.3	3.0	85.5	.43
1969	23.8	45.4	23.3	92.5	18.6	2.1	71.8	.36

1/ - Includes Maine and Pacific packs for years before 1967. Pacific pack was negligible in 1967 and 1968 and **zero** in 1969.
2/ - Includes some canned sea herring.
3/ - Canners' and distributors' stocks of Maine sardines.
4/ - Product weight.
Figures may not add to total because of rounding.

Table 52. Sources and disposition of canned sardines, quarterly 1968-69

Year	Sources				Disposition			
	Production[1]	Imports[2]	Beginning stocks[3]	Total	Ending stocks[3]	Exports	Apparent consumption	
							Total	Per capita
	Million pounds[4]							Pounds
1968								
1st quarter	7.6	15.3	13.2	36.1	15.5	0.5	20.1	0.102
2d quarter	6.1	13.4	15.5	34.9	13.6	.2	21.2	.107
3d quarter	16.2	16.7	13.6	46.5	23.4	1.4	21.7	.110
4th quarter	9.8	13.4	23.4	46.6	23.3	1.0	22.3	.112
Year	39.8	58.9	13.2	111.9	23.3	3.0	85.6	.433
1969								
1st quarter	2.2	9.1	23.3	34.6	19.5	.1	15.0	.075
2d quarter	4.0	13.1	19.5	36.6	16.0	.3	20.3	.101
3d quarter	14.1	11.6	16.0	41.7	18.3	.9	22.5	.111
4th quarter	3.6	11.6	18.3	33.5	18.6	.9	14.0	.069
Year	23.8p	45.4p	23.3p	92.5p	18.6	2.1p	71.8	.356

1/ - Maine pack only, Pacific pack was negligible in 1968 and zero in 1969.
2/ - Includes some canned sea herring.
3/ - Canners' and distributors' stocks of Maine sardines.
4/ - Product weight.
p - Preliminary.
Figures may not add to total because of rounding.

CANNED SARDINES

REVIEW - 1969

Production of Maine sardines and imports of canned sardines both dropped in 1969. Despite a higher level of holdings at the beginning of the year, canned sardine supplies were 19 million pounds less than in 1968.

Landings Dropped Drastically

Sea herring landed in Maine were only 53.6 million pounds, round weight, in 1969 (table 53). This catch was the lowest since 1960. About 70 percent of the catch was landed in the third quarter of last year. The availability of sea herring is not simply a matter of abundance, but also that of the schooling behavior of herring. On the Pacific Coast, sardine landings were only about 100,000 pounds in 1969 (table 54).

Exvessel Prices Down

The average exvessel price in 1969 was down to 2.1 cents a pound from 2.4 cents in 1968 (table 57). Prices were stable at 2.5 cents in the first half year. They started to drop in June and went to 1.7 cents in July and 1.4 cents in August before recovering to 2.1 cents in the last 2 months of 1969.

Pack Down 40 Percent

Production of Maine canned sardines last year was 23.8 million pounds according to the Maine Sardine Council, down from 39.8 million pounds in 1968 (table 56). Packing was very slow in the first quarter, and only 2.2 million pounds were produced. In the second quarter, production almost doubled and peaked in the third quarter at 14.1 million pounds.

Imports of Canned Sardines Declined by 23 Percent

The quantity of canned sardines imported into the United States declined markedly during 1969. Imports for the year were 45.4 million pounds--13.5 million pounds less than in 1968 (table 52). The biggest drop--12.2 million pounds--was registered in the imports from The Republic of South Africa. Imports from Canada dropped 1.3 million pounds. Receipts from Norway and Portugal were almost the same as a year earlier.

Holdings Up 10 Million Pounds

The building up of holdings during the latter part of 1968 helped to increase the supplies at the beginning of 1969. Inventories were 23.3 million pounds at the beginning of last year--10 million pounds more than that of the previous year (table 52). This surplus was far from enough to offset the combined decline of almost 30 million pounds in production and imports. Compared with 1968, supplies last year were 19 million pounds less.

Demand

Consumption Lowest Since 1959

Consumption of canned sardines in the United States was 71.8 million pounds last year, a decline of 16 percent from the year before (table 52). In 1959, when U.S. production of canned sardines was more than three times bigger than last year, U.S. consumption was only 71 million pounds. In early years, U.S. exports of canned sardines exceeded imports. Since 1960, the trend was reversed, resulting in less domestic production and lower consumption from year to year.

Last year's consumption was a drastic drop because not only did production decline but imports and Government purchases also declined. Sales in the second and third quarters were comparable to the previous year. Consumption in the first quarter was 5 million pounds lower than in 1968. In the fourth quarter, imports increased but production was far behind.

Price Level Steady

Both wholesale and retail prices of canned sardines were relatively stable throughout 1969 (table 57). A slight increase occurred in the last 2 months.

The annual average wholesale price of canned sardines in 1969 was $12.30 per case, almost the same as in 1968. The average retail price increased slightly from 16.1 cents per can to 16.5 cents last year, up 2.5 percent. After adjustment to constant dollar value, both prices had dropped.

OUTLOOK - 1970

Supply

Canned sardine production from domestic landings is expected to continue to decline. The continuous weakening of exvessel prices for the last 3 years is not likely to spur fishing effort in the Gulf of Maine. No prospect is in sight for an immediate recovery of sardine pack on the West Coast. The maintenance of U.S. production at the 1969 level of 24 million pounds this year will depend on imports of raw sea herring, mostly from Canada.

Imports of canned sardines have been increasing since 1956 except for the last 2 years. Prospects are that imports will not increase too much from last year's 45.4 million pounds.

Demand

The slackening demand for canned sardines last year has kept the price levels steady in both wholesale and retail markets. Under an inflationary pressure, such as experienced last year, prices of most food items went up sharply. This was not the case with canned sardines. In the face of limited domestic consumption of canned sardines and the trend of many consumers toward purchases of canned tuna and salmon, the demand for sardines is not likely to pick up to any great extent from last year.

Table 53. Monthly landings of sea herring in Maine, 1966-69

Year	1966	1967	1968	1969
	Million pounds			1/
January	0.2	1.1	0.7	2/
February	1.5	.3	.7	1.7
March	.9	4.0	2.5	3.3
1st quarter	2.6	5.4	3.8	5.0
April	.7	3.3	5.0	.9
May	.4	.4	.9	.2
June	5.5	3.3	5.7	5.5
2d quarter	6.7	6.9	11.6	6.5
July	11.5	9.0	13.8	10.6
August	15.9	14.7	16.1	14.9
September	9.3	15.4	12.1	11.7
3d quarter	36.7	39.1	41.9	37.2
October	7.6	10.4	8.3	4.7
November	3.4	2.7	2.7	.1
December	1.3	.1	1.4	2/
4th quarter	12.3	13.2	12.4	4.8
Year	58.3	64.6	69.7	53.6

1/ - Round weight.
2/ - Less than 500 pounds.

Table 54. Sardine landings in California and sea herring landings in Maine, 1950-69

Year	California sardines	Maine sea herring
	Million pounds, round weight	
1950	619.5	185.5
1951	328.9	59.7
1952	14.3	144.7
1953	9.5	100.6
1954	136.5	123.6
1955	145.6	99.4
1956	69.6	140.5
1957	45.9	153.6
1958	207.4	171.0
1959	74.4	117.2
1960	57.5	152.3
1961	43.2	54.5
1962	15.4	156.7
1963	7.1	152.3
1964	13.0	60.9
1965	1.9	70.2
1966	.9	58.3
1967	.1	64.6
1968	.1	69.7
1969		
1st quarter	.01	5.03
2d quarter	.05	6.50
3d quarter	.02	37.25
4th quarter	.02	4.84
Year	.10	53.62

Table 55. U.S. production of canned sardines, 1950-69

Year	Atlantic Maine	Pacific	Total
	Million pounds[1]		
1950	90.0	216.2	306.2
1951	39.2	128.9	168.2
1952	82.6	4.8	87.4
1953	65.1	2.9	68.0
1954	68.7	60.2	128.9
1955	29.7	63.7	93.3
1956	52.2	34.0	86.2
1957	51.9	22.4	74.3
1958	49.1	100.0	149.1
1959	41.0	34.0	75.0
1960	46.7	27.7	74.5
1961	17.6	18.9	36.5
1962	50.2	6.2	56.4
1963	37.9	2.6	40.5
1964	20.3	5.4	25.7
1965	29.6	.4	30.0
1966	31.1	.1	31.2
1967	29.3	2/	29.3
1968	39.8	2/	39.8
1969	23.8	-	23.8

1/ - Product weight.
2/ - Amount negligible.

Table 56. Supply of canned sardines--domestic pack and imports, 1957-69

Year	U.S. pack[1]	Imports[2]	Total
	Million pounds[3]		
1957	74.3	34.5	108.8
1958	149.2	39.2	188.3
1959	75.0	32.8	107.7
1960	74.5	38.0	112.4
1961	39.5	53.6	90.1
1962	56.4	65.1	121.5
1963	40.5	50.1	90.5
1964	25.7	53.7	79.4
1965	30.0	53.0	83.0
1966	31.2	67.3	98.5
1967	29.3	61.9	91.2
1968	39.8	58.9	98.7
1969	23.8	45.4	69.2
	Percent of total		
1957	68.3	31.7	100.0
1958	79.2	20.8	100.0
1959	69.6	30.4	100.0
1960	66.2	33.8	100.0
1961	40.5	59.5	100.0
1962	46.4	53.6	100.0
1963	44.7	55.3	100.0
1964	32.4	67.6	100.0
1965	36.2	63.8	100.0
1966	31.7	68.3	100.0
1967	32.1	67.9	100.0
1968	40.3	59.7	100.0
1969	34.4	65.6	100.0

1/ - Includes the pack of Maine and Pacific sardines. Pacific sardine packs from 1967 to 1968 were negligible, and zero in 1969.
2/ - Includes sea herring.
3/ - Product weight.

Table 57. Monthly exvessel, wholesale and retail prices of sardines 1966-70

Prices/ Year	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year average
						Cents per pound 1/							
Exvessel price (Maine area)													
1966	2.2	1.6	1.6	1.4	1.7	2.0	1.9	2.3	2.1	2.3	1.6	2.1	1.9
1967	2.4	2.4	2.4	2.3	2.3	2.5	2.5	2.4	2.4	2.3	2.3	2.0	2.5
1968	2.5	1.9	2.5	2.2	2.5	2.2	2.4	2.5	2.5	2.5	2.5	2.4	2.4
1969	2.4	2.5	2.5	2.5	2.5	2.1	1.7	1.4	1.7	1.8	2.1	2.1	2.1p
1970	-	-											
						Dollars per case							
Wholesale price													
1966	10.25	10.25	10.25	10.25	10.25	10.25	10.25	10.25	10.25	11.25	11.25	11.25	10.50
1967	11.25	11.25	11.25	11.25	11.25	11.25	11.25	11.25	12.00	12.25	12.25	12.25	11.56
1968	12.25	12.25	12.25	12.25	12.25	12.25	12.25	12.25	12.25	12.25	12.25	12.25	12.25
1969	12.25	12.25	12.25	12.25	12.25	12.25	12.25	12.25	12.25	12.25	12.63	12.63	12.31
1970	12.63												
						Cents per can 3/							
Retail price (BLS)													
1966	13.9	14.0	14.0	14.1	14.2	14.2	14.2	14.3	14.3	14.3	14.6	14.7	14.2
1967	15.3	15.0	15.1	15.3	15.0	14.9	14.9	14.9	15.0	15.1	15.4	15.5	15.1
1968	15.8	16.0	15.8	15.8	16.0	16.1	16.1	16.1	16.2	16.3	16.3	16.3	16.1
1969	16.3	16.5	16.4	16.5	16.4	16.5	16.5	16.4	16.5	16.6	16.6	16.6	16.5
1970	16.7												

1/ - Round weight.
2/ - 100 - 1/4-lb. cans per case. New York prices taken on Monday or Tuesday of the week in which the 3d day of the month falls.
3/ - U.S. average price per 4-oz. can in leading U.S. cities.
p - Preliminary.

DEPARTMENT OF DEFENSE PURCHASES

Military purchases of food fish products decreased last year for the third consecutive year

Purchases of canned fish products were noticeably higher than fresh and frozen products in 1967 and 1968 but were about equal last year--7.4 million pounds for fresh and frozen and 7.6 million pounds for canned (table 58). Total purchases were about 15 million pounds, a decline of 26 percent from 1968.

Compared with the previous year the value of military purchases in 1969 was down almost 10 percent for fresh and frozen and 31 percent for canned products. The total value paid was over $8.5 million; about $5 million was for canned products.

The major decline in purchases in 1969 was the decrease in canned sardines from 2.9 million pounds to only 80,000 pounds. Other reductions were 2.4 million pounds of canned tuna and over 1 million pounds each for fillets of haddock and flounders. The cut in fish portion purchases was very slight. Fish portions accounted for about one-third of the total purchase in the fresh and frozen category while canned tuna was over 90 percent of canned fish purchases.

Canned salmon were eliminated altogether in 1968 but were put back on the procurement list in 1969 when 605,000 pounds were purchased for $480,000.

Table 58. Department of Defense purchases of food fish products, 1968-69

Item	Quantity		Value		Percent change 1968 to 1969	
	1968	1969	1968	1969	Quantity	Value
	Thousand pounds		Thousand dollars		Percent	
Fresh & frozen						
Cod fillets	106	179	37	75	+68.9	+102.7
Flounder fillets	2,516	1,592	981	856	-36.7	-12.8
Ocean perch fillets	3,178	2,062	1,113	742	-35.1	-33.3
Haddock fillets	732	591	345	305	-19.3	-11.6
Haddock & cod portions	2,534	2,286	1,044	1,121	- 9.8	+ 7.4
Halibut steaks	771	680	377	415	-11.8	+10.1
Total	9,837	7,390	3,897	3,514	-24.9	- 9.8
Canned						
Tuna	9,229	6,872	5,850	4,487	-25.5	-23.3
Salmon	-	605	-	478	-	-
Sardines	2,861	80	1,436	45	-97.2	-96.9
Total	10,290	7,557	7,286	5,010	-26.6	-31.2
Total fresh, frozen & canned	20,127	14,947	11,183	8,524	-25.7	-23.8

LIST OF TABLES

Table		Page
1	Supplies of selected fishery products, 1968 and 1969	2
2	U.S. landings compared with imports of selected finfish species, 1967, 1968, and 1969	5
3	Per capita consumption of selected fishery products, by quarter, 1968-69	6
4	Sources and disposition of fresh and frozen flounders in the United States, 1960-70	6
5	Sources and disposition of fresh and frozen cod (excluding frozen blocks) in the United States, 1962-70	7
6	Sources and disposition of fresh and frozen haddock in the United States, 1960-70	8
7	Sources and disposition of Atlantic pollock and cusk	9
8	Sources and disposition of ocean perch (excluding blocks) in the United States, 1962-70	10
9	Consumption of fresh and frozen groundfish fillets, 1969	10
10	Monthly wholesale prices of fresh and frozen cod, 1969	17
11	Monthly wholesale prices of fresh and frozen flounders, 1969	19
12	Monthly wholesale prices of fresh and frozen haddock, 1969	20
13	First-of-month cold storage holdings of flounder fillets in the United States and Canada, 1968-70	22
14	Monthly exvessel, wholesale and retail prices of flounders, 1968-70	22
15	First-of-month cold storage holdings of cod fillets in the United States and Canada 1968-70	23
16	Monthly exvessel, wholesale, and retail prices of cod, 1968-70	23
17	Haddock landings in the New England Region by month and quarter, 1968-70	24
18	Haddock landings, value and average exvessel price, New England by size of fish annually for 1962-67, quarterly for 1968, and monthly for 1969.	25
19	First-of-month cold storage holdings of haddock fillets, United States and Canada 1968-70	26

Table		Page
20	Monthly exvessel, wholesale, and retail prices of haddock in the United States, 1968-70	26
21	First-of-month cold storage holdings of ocean perch fillets in the United States and Canada, 1968-70	27
22	Monthly exvessel, wholesale, and retail prices of ocean perch, 1968-70	27
23	Monthly exvessel and wholesale prices of pollock and exvessel prices of cusk in the United States, 1968-70	28
24	Sources and disposition of frozen fish blocks in the United States, 1962-69	30
25	Cod blocks: Canadian freezings and United States imports, by country of origin, monthly 1968-69	32
26	Imports of fish blocks and slabs by species 1968-69	32
27	Sources and disposition of fish sticks and portions in the United States, 1962-69	34
28	First-of-month cold storage holdings of frozen fish blocks in the United States and Canada, and sticks and portions in the United States, 1968-70	36
29	Monthly prices to primary wholesalers: cod and haddock blocks, sticks and portions, 1968-70	37
30	Sources and disposition of Pacific halibut in the United States, 1962-70	38
31	Landings of halibut on the Pacific Coast by United States and Canadian vessels, 1967-69	40
32	Monthly exvessel, wholesale, and retail prices of Pacific halibut, 1968-70	41
33	First-of-month cold storage holdings of halibut in the United States and Canada 1968-70	44
34	Sources and disposition of canned salmon in the United States, 1968 and 1969	45
35	Source and disposition of fresh and frozen salmon 1968 and 1969	46
36	Quantity and value of U.S. imports and exports of canned and fresh and frozen salmon	52
37	Total supplies of canned salmon and monthly shipments in percentages by species, 1967-68, 1968-69 and 1969-70 marketing years	53

Table		Page
38	Total supplies of canned salmon and monthly shipments in percentages by size of pack, 1967-68, 1968-69 and 1969-70 marketing years	54
39	U.S. monthly wholesale prices of canned salmon and retail prices of salmon steaks, 1968-70	54
40	U.S. canned salmon exports to United Kingdom and other countries by months, July 1964 to March 1970	55
41	U.S. canned salmon disappearance in domestic and foreign markets by 6-month periods, July 1964 to December 1969	56
42	Domestic sales and exports and wholesale prices of canned red salmon and pink salmon by marketing year from July 1964 through June 1970 with percentage changes from the previous marketing year	56
43	World production and U.S. consumption of tuna 1960-69	60
44	Available quantity of canned tuna in the United States, 1960-69	60
45	Tuna landings, by region 1960-69	61
46	U.S. pack of canned tuna, by region, 1960-69	62
47	U.S. imports of canned tuna annually for 1960-67, quarterly for 1968, and monthly 1969	63
48	U.S. imports of fresh and frozen tuna, annually for 1960-67, quarterly 1968, and monthly 1969	64
49	Monthly U.S. canned tuna wholesale, import, and retail prices, 1965-70	65
50	Monthly prices for imported raw tuna in the United States, 1964-70	67
51	Sources and disposition of canned sardines, annually 1950-69	68
52	Sources and disposition of canned sardines, quarterly 1968-69	68
53	Monthly landings of sea herring in Maine, 1966-69	71
54	Sardine landings in California and sea herring landings in Maine, 1950-69	71
55	U.S. production of canned sardines 1950-69	72
56	Supply of canned sardines--domestic pack and imports, 1957-69	72
57	Monthly exvessel, wholesale and retail prices of sardines 1966-70	73
58	Department of Defense purchases of food fish products, 1968-69	74

List of Figures

Figure No.		Page
1	Flounders: Landings and exvessel prices	11
2	Flounders: U.S. holdings and wholesale prices	12
3	Cod: Landings and exvessel prices (New England)	13
4	Cod: U.S. holdings and wholesale prices	13
5	Haddock: Landings and exvessel prices (New England)	14
6	Haddock: U.S. holdings and wholesale prices	15
7	Ocean perch: Landings and exvessel prices (New England)	16
8	Ocean perch: U.S. holdings and wholesale prices	16
9	Monthly wholesale prices of cod, fresh and frozen, 1969	17
10	Monthly wholesale prices of flounders, fresh and frozen, 1969	19
11	Monthly wholesale prices of haddock, fresh and frozen, 1969	20
12	Fish blocks: U.S. holdings and wholesale prices	29
13	Pacific halibut: Landings and exvessel prices	40
14	Pacific halibut: First of month holdings and wholesale prices	44
15	Year-to-year percent change in prices of canned pink and red salmon and total quantity sold in the U.S. and exported from the 1964-65 marketing year to the 1969-70 marketing year	49
16	Tuna: Landings and exvessel prices	58

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